Data Report for

Shenandoah Watershed Study, Virginia Trout Stream Sensitivity Study, And Related Projects December, 2008

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1 Data Reported

Surface water characteristic data are provided for the entire period of record available as of 18 December 2008. These data have been finalized through 31 December 2007. Data beyond that are largely preliminary. Discharge data are provided for the entire period of record through 31 December, 2007. Caution is suggested if using preliminary data in analyses. Use of preliminary data in publications is discouraged. Because errors in the historical data are sometimes found and corrected, data obtained previously should be discarded and replaced with this data.

Quality assurance results are based on the calendar year 2007. These results are based on analyses of field replicates, trip blanks, laboratory QC samples, and certified reference materials.

2 Summary Description of UVA Program

The reported data are for surface water samples collected from forested mountain watersheds in Shenandoah National Park and western Virginia under a number of short and long-term projects. These data include chemical analysis of surface water samples collected non-periodically, quarterly, weekly, and more-frequently during storm flows, and volatile residue analyses of water samples collected quarterly in Shenandoah National Park. Also included are temperature and discharge measurements.

During 2007 samples were collected at 149 headwater sites (Table 1) in 26 western Virginia counties. Most of the sites are on streams that drain National Forest, National Park or other public land. Quarterly samples were collected during the last seven days of January, April, July, and October. Weekly samples were collected at six sites in Shenandoah National Park. Continuous discharge measurements were collected at five sites in Shenandoah National Park. Flow-actuated episodic high-flow event samples were obtained at three sites in Shenandoah National Park.

Table 1: Site count by organization and project

Organization	Project ID	Project Name	N
SHEN	SOURCH2O	Shenandoah Source Waters	65
SHEN	SWAS	Shenandoah Watershed Study	7
SHEN	VTSSS	Virginia Trout Stream Sensitivity Study	8
UVAVTSSS	GRAYSON	Grayson Highlands TU Stream Survey	6
UVAVTSSS	NONE	No particular project	6
UVAVTSSS	VTSSS	Virginia Trout Stream Sensitivity Study	57
			149

A total of 10,641 surface water characteristic results were obtained in 2007 (Table 2). Most of these were obtained in Shenandoah National Park (SHEN) or for the VTSSS (Virginia Trout Stream Sensitivity Study) project outside of SHEN.

Table 2: Results count by organization and project

Organization	Project ID	Project Name	Start Date	Duration	# of results
SHEN	SOURCH2O	Shenandoah Source Waters	01MAY2007	ongoing	1452
SHEN	SWAS	Shenandoah Watershed Study	01OCT1979	ongoing	4955
SHEN	VTSSS	Virginia Trout Stream Sensitivity Study	01OCT1987	ongoing	485
UVAVTSSS	GRAYSON	Grayson Highlands TU Stream Survey	01MAR2006	31JAN2007	74
UVAVTSSS	N/A	No particular project			182
UVAVTSSS	VTSSS	Virginia Trout Stream Sensitivity Study	01OCT1987	ongoing	3493
					10641

A listing of all sites at which samples were collected in 2007 is provided in ***Appendix 1 – Collection sites***. Details concerning projects are provided in ***Appendix 2 - Projects Detailed, Sorted by ID***. A detailed printout of the 2007 surface water characteristic data can be found in ***Appendix 8 – Results***.

3 Data Collection and Analysis

During 2007, staff from the Department of Environmental Sciences at the University of Virginia (UVA), the Shenandoah National Park (SHEN), the U.S. Geological Survey (USGS), the USDA Forest Service (USDA), the Virginia Department of Game and Inland Fisheries (VDGIF), and volunteers from Trout Unlimited (TU) collected samples at established sites.

Samples were collected in 500 mL low-density and 125 mL high-density polyethylene (Nalgene) bottles that were pre-washed with laboratory-grade detergent and hydrochloric acid and rinsed with de-ionized water. Prior to sample collection each bottle was rinsed three times with the sampled streamwater. Upon collection the samples were placed in insulated containers with refrigerant for delivery to the project laboratory at the Department of Environmental Sciences at the University of Virginia. Upon receipt at the laboratory, the samples minus an aliquot poured off for DOC and aluminum analysis were preserved by addition of chloroform (0.5mL/500mL) and stored at ambient laboratory temperature (about 23 deg. C). DOC/aluminum aliquots were preserved by refrigeration. Analyses included major acid-base constituents and DOC. Samples from all projects were analyzed concurrently. Methods of analysis are summarized in ***Appendix 3 – Analytical Procedures Detailed, Sorted by ID***. All analyses were performed at the Department of Environmental Sciences, University of Virginia.

The North Fork of Dry Run, Paine Run, Piney River, Staunton River, and White Oak Run watersheds in Shenandoah National Park were gauged using standard methods of the U.S. Geological Survey (Rantz et al., 1982). Periods of missing gage data have been estimated using linear regression on discharge at other gauged sites within Shenandoah National Park.

4 Data Quality Assurance

Quality assurance of analysis of stream-water samples was obtained by charge ratio analysis, use of minimum detection and lower quantification limits, bias analysis, precision analysis, trip blank analysis, and analysis of reference samples. This section describes the results of these analyses and lists the minimum detection limits and lower quantification limits used during the period.

Charge ratio was in-control for some projects but not others, particularly those with heterogeneous sampling environments. Detection limits compared favorably with objectives. Precision analysis based on analysis of field replicates was observed to be in-control except for nitrate and ammonium. Trip blank analysis indicated a low level bias for many characteristics. Analysis of laboratory check samples indicated good precision, while analysis of certified reference materials indicated poorer precision on some CRM cations and a low systematic bias on potassium. Historic results from participation in the Environment Canada collaborative study are overall quite good, although they suggest historical trouble with conductivity, ammonia, and reactive silica.

During 2008 several changes were implemented to address these issues. The number of field replicates was increased. In the lab, the use of additional quality check samples was instituted. Calibration standards were adjusted to better match expected concentrations, and additional low-level calibration standards were included.

4.1 Charge ratio analysis

Charge ratio for samples is defined as the sum of anions divided by the sum of base cations and is a characteristic listed in EPA STORET. We calculate the sum of anions (SAA) as

$$SAA = [SO_4^{2-}] + [CL^-] + [NO_3^-] + [ANC]$$

We calculate the sum of base cations (SBC) as

$$SBC = [Ca^{2+}] + [Mg^{2+}] + [Na^+] + [K^+] + [NH_4^+]$$

or as

$SBC = [Ca^{2+}] + [Mg^{2+}] + [Na^{+}] + [K^{+}]$

for cases where NH4 is not measured. Over the period of record several different instruments and methods have been used to measure anions, cations and ANC, and so analysis of charge ratio statistics requires a division of the data into groups corresponding to the different methods used. In addition, different projects may have different natural ranges of these characteristics due to the presence of unmeasured ions. The methods used during this reporting period are listed in Table 3.

Table 3: Methods used to calculate charge ratio

Charge ratio variable name	Description
IONRATIO_MET_IC2_AUTO	sum of anions by IC2 and titration by Metrohm auto-titrator/ sum of cations by IC2, collected by automated sampler
IONRATIO_MET_IC2_GRAB	sum of anions by IC2 and titration by Metrohm auto-titrator/ sum of cations by IC2, collected by hand

To calculate SAA and SBC when one or more of the characteristics had a censored value, we substituted either one half of the minimum detection limit (MDL) or one half of the sum of the MDL plus the lower quantitation limit (LQL), depending on whether the value determined was below the MDL or below the LQL, respectively.

The capability of a process to operate within specified limits is often quantified using the indices C_p or C_{pk}, also known as process capability ratios (Montgomery, 1997). The formulas for C_p and C_{pk} are:

$$C_p = \frac{USL - LSL}{6\sigma}$$

$$C_{pk} = \min\left(\frac{USL - \mu}{3\sigma}, \frac{\mu - LSL}{3\sigma}\right)$$

where μ is the sample mean, σ the sample standard deviation, and *USL* and *LSL* are the upper specification limit and lower specification limit, respectively. When a process is “on target”, or no target is specified, the C_p is appropriate. When a target is specified or the process is off-target, the C_{pk} provides a better metric of the process’s ability to remain within specification limits and on-target. For an off-target process, the C_p

provides a metric of the process's ability to operate within limits corresponding to the on-target process. Generally, a C_p or C_{pk} in excess of 1.3 is desired to meet the objectives of the Six Sigma philosophy (Montgomery, 1997). Values less than 1.3 indicate a need for process improvement, assuming sufficient observations have been made.

Lower and upper specification limits for charge ratio have been given in the literature (Morrison, 1991) as 0.85 and 1.15 for the Maine Region and 0.80 and 1.10 for the Catskills Region, respectively. We report statistics based on the Catskills Region limits because they more-closely approximate the range we observe in our samples. These limits are stated as representing a 99% confidence interval for acceptable individual results. A 99% confidence interval is a less stringent quality requirement than that of the Six Sigma philosophy; it corresponds approximately to a five-sigma philosophy. A value of approximately 1.1 in the C_p or C_{pk} provides the same level of assurance that a process is in-control with respect to a 99% confidence interval requirement as the value of 1.3 does for the Six Sigma requirement.

We report both the C_p and the C_{pk} because of the uncertainty in what the target value should be. Confidence intervals for the C_p and the C_{pk} can be large for small sample size. Figures 1-2 graphically illustrate the frequency with which charge ratio fell within the target specification limits of 0.95 ± 0.15 for the various measurement methods, and give a confidence interval for the C_p and the C_{pk}.

Figure 1 shows charge ratio distributions for 106 grab samples (15% of the total) where charge ratio was determined using auto-titration of ANC and using ion chromatography for all ions. The upper part of Figure 1 is for 12 grab samples not associated with any particular project. The results are unremarkable. The lower part of Figure 1 is for 96 grab samples associated with the Source Waters Project. Although the mean charge ratio is very nearly on-target, the wide variance in these results leads to sub-standard values of C_p and C_{pk}. This project involves high headwater sites and springs. It is not unreasonable to assume that these sites experience natural variation in charge balance between sites that is higher than for the collection of Catskill sites EPA used to set the specification limits. Several sites in particular had high charge ratio. These results were not removed because the analyses for those results were in-control.

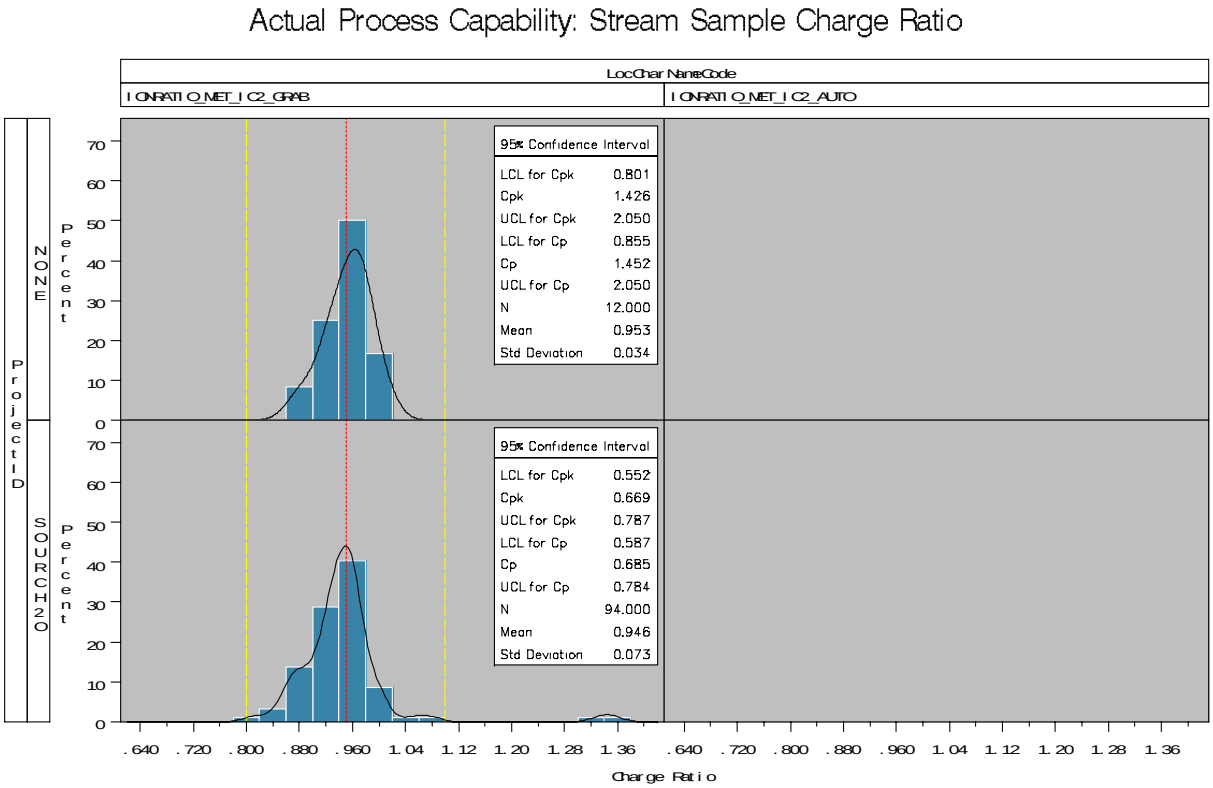


Figure 1: Distributions of charge balance ratio where charge concentrations were determined using auto-titration of ANC and using ion chromatography for all ions. Upper plot: grab samples not associated with any particular project. Lower plot: grab samples associated with the Source Waters Project.

Figure 2 shows the distributions of charge ratio for 587 samples (85% of the total) analyzed using auto-titration of ANC and using ion chromatography for all ions. Samples collected for the SWAS project by both manual and automatic means had charge balance ratios well within the specification limits as evidenced by values of C_p and C_{pk} between 1.14 and 1.36. Samples collected for the VTSSS project were on-target but had excessive variation and sub-standard C_p and C_{pk}. Several sites within this group have either consistently low or consistently high charge ratio, indicating the presence of unmeasured ions.

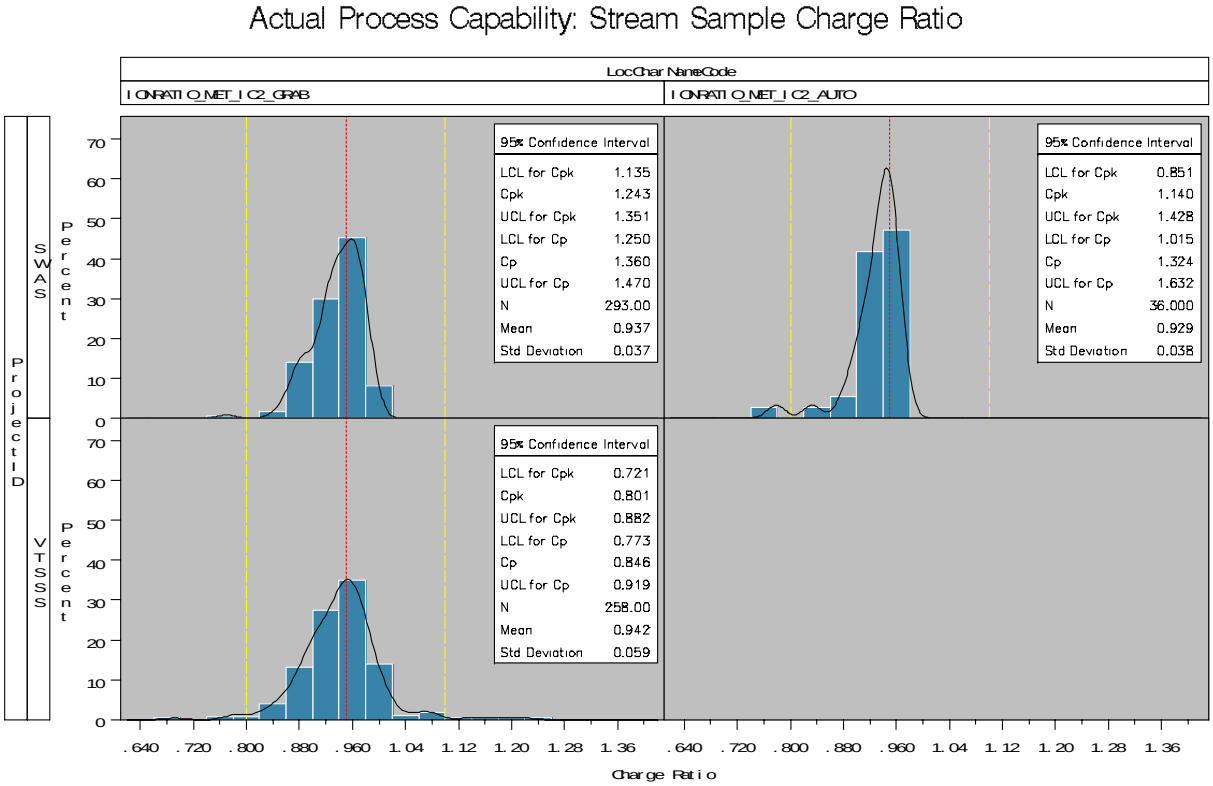


Figure 2: Distributions of charge balance ratio where charge concentrations were determined using auto-titration of ANC and using ion chromatography for all ions. Upper left: grab samples, SWAS project. Upper right: auto-sampler samples, SWAS project. Lower left: grab samples, VTSSS project.

4.2 Minimum detection and lower quantification limits

In ***Appendix 4 – MDLs and LQLs used*** we report the minimum detection limits (MDLs) and lower quantification limits (LQLs) actually used during the 2007 reporting period. MDLs and LQLs were calculated using historical analysis of de-ionized water and/or prepared low-level samples that consisted of analytes in concentrations of 1% of the concentration of the highest calibration standard. The MDL is a function of the standard deviation of the *n* analyzed samples, the number of samples, and the t-distribution, as follows: $MDL = s*t$, where *s* is the standard deviation and *t* is the 99th quantile from a t-distribution with *n-1* degrees of freedom. The LQL is defined as 3.18 times the MDL.

Table 4 summarizes detection limits used by UVA during the reporting period, and compares them with detection limit objectives suggested in Table 4 of Paulsen (1997).

The detection limits for all characteristics other than silica were well-below their objective values. The detection limit for silica was marginally above the objective. However, most if not all field results for silica are well above the lower quantification limit, so this failure does not appear to be of consequence.

Table 4: Detection limit summary

Analyte	Objective (from Table 6)	MDL
Chloride	1.0	0.076
Nitrate	0.5	0.081
Sulfate	1.0	0.310
Calcium	1.0	0.468
Magnesium	1.0	0.218
Sodium	1.0	0.029
Potassium	1.0	0.029
Aluminum	10.0	1.524
Ammonium	1.0	0.013
Silica	0.84	1.051

4.3 Precision analysis based on field replicates

Precision was monitored by collecting replicate samples (Table 5). During each of the quarterly sampling windows replicates were collected for the VTSSS project at approximately five locations each quarter. These locations are rotated randomly so that all seasons are sampled at each site over time. A number of replicate samples were also collected for the Source Waters Project.

Table 5: Field replicates collected by organization and project

Organization	Project ID	n
SHEN	SOURCH2O	25
SHEN	VTSSS	4
UVAVTSSS	GRAYSON	1
UVAVTSSS	VTSSS	14

During the period 2007 44 replicate samples were analyzed. The detailed results are given in ***Appendix 5 – Precision Analysis – All***. We use specification limits given in the last column of Table 6, adapted from Paulsen (1997), to assess performance.

Table 6: Quality Assurance Objectives: Analytical Detection Limits, Precision, and Accuracy Objectives

Variable	Reporting Units	Detection Limit	Concentration Range	Precision[1] and Accuracy[2] Objectives	$x\sqrt{2}$ for duplicate differences and RPD
pH, field, closed system or equilibrated	pH units	na	≤ 5.75 > 5.75	±0.075 ±0.15	±0.106 ±0.21
ANC	µeq/L	na	≤ 100 > 100	±5 ±5%	±7 ±7%
Conductivity	µS/cm	na	≤ 50 > 50	±1.0 ±2%	±1.4 ±3%
Color	PCU	na	≤ 50 > 50	±5 ±10%	±7 ±14%
Cl^-	µeq/L	1.0	≤ 20 > 20	±1.0 ±5%	±1.4 ±7%
NO_3^-	µeq/L	0.5	≤ 10 > 10	±0.5 ±5%	±0.7 ±7%
SO_4^{2-}	µeq/L	1.0	≤ 20 > 20	±1.0 ±5%	±1.4 ±7%
Ca, Mg, Na, K	µeq/L	1.0	≤ 20 > 20	±1.0 ±5%	±1.4 ±7%
Al, total dissolved, and total and organic monomeric	µg/L	10	≤ 100 > 100	±10 ±10%	±14 ±14%
DOC and DIC	mg/L	0.1	≤ 1 > 1	±0.1 ±10%	±0.14 ±14%
NH_4	µeq/L	1.0	≤ 20 > 20	±1.0 ±5%	±1.4 ±7%
SiO_2	mg/L	0.05 (0.84 µM/L)	≤ 1 (17 µM/L) > 1 (17 µM/L)	±0.05 (0.84 µM/L) ±5%	±0.07 (1.17 µM/L) ±7%

[1] The precision objectives are based on the standard deviation of repeated measurements at lower concentrations, and as percent relative standard deviation at higher concentrations. If the difference between duplicates or the relative percent difference (RPD) is used to estimate precision, modify the above objectives so that they are also based on the difference and RPD. The objectives are modified by multiplying by $\sqrt{2}$.

[2] Accuracy is estimated as the difference between measured and target values of samples of known concentration at lower concentrations, and as percent difference at higher concentrations.

Table 7 gives precision results for all characteristics and for those characteristics where results fell outside of the specification limits given in Table 6. Under the null hypothesis that even when in a process is in control, a small percentage of results will fall outside of the specification limits, we calculate the probability of getting *k* or more defects. If this probability is significant, say 0.05 or greater, then the number of defects seen does not suggest the null hypothesis should be rejected. We assume results are independent and use a common individual probability of 0.01 (one out of a hundred) that an individual result could be outside of the specification limits even when the process is in control. Table 7 indicates that excluding ammonium and nitrate, precision of analyses performed in the UVA lab during the period was in-control (p=0.9378).

Table 7: Precision results summary

Characteristic	Defects (k)	total	Percent defective	Probability of k or more outside of specification limits given acceptable individual probability of 0.01
ANC	0	44	0.00%	0.3574
calcium	1	43	2.33%	0.3509
chloride	1	43	2.33%	0.3509
conductivity	0	44	0.00%	0.3574
potassium	0	44	0.00%	0.3574
magnesium	0	44	0.00%	0.3574
sodium	0	44	0.00%	0.3574
ammonium	4	43	9.30%	**0.0009**
nitrate	10	44	22.73%	**0.0000**
pH	0	44	0.00%	0.3574
silica	0	44	0.00%	0.3574
sulfate	0	44	0.00%	0.3574
Monomeric aluminum, organic fraction	0	0	#DIV/0!	#N/A
Total monomeric aluminum	0	8	0.00%	0.0773
ALL	16	533	3.00%	**0.0001**
ALL minus nitrate and ammonium	2	446	0.45%	0.9378

4.4 Trip blank analysis

Trip blanks are sample bottles filled with de-ionized water that are carried to sample site locations, returned, and analyzed to test for system-wide contamination. One trip

blank was analyzed during each quarterly sampling window. During 2007 4 trip blanks were analyzed. The detailed results of trip blank analysis are given in ***Appendix 6 - Trip Blank Summary Statistics - Period of Record***.

Except for ANC, pH, and conductivity, trip blank results should be less than the MDL. Results above the MDL indicate contamination or some bias in the measurement process, although that bias may only be applicable at low levels. Table 8 indicates a substantial number of results above MDL. Based on these and previous results, we conclude that all of the trip blanks were contamination-free, but that the current methodology has a low-level bias.

Table 8: Trip blank analysis summary

Variable	Count	Censored	< MDL	< LQL	≥ LQL	# of defects (k)	% defective	Probability K≥k under H_0
All except pH, ANC, conductivity	40	16	13	3	24	27	67.50%	0.0000
By IC2	32	8	7	1	24	25	78.13%	0.0000
By TC	8	8	6	2	0	2	25.00%	0.0002

4.5 Precision analysis based on reference samples

Reference samples were analyzed during all analysis sessions for pH, alkalinity, conductivity, cations, anions, aluminum, DOC, and silica. Analysis results for reference samples are summarized in ***Appendix 7 - Lab QC results***. Appendix 7 contains one table listing the reference samples used. Some of these were certified reference materials (CRMs), some were quality control check samples or low-level samples to be used for detection limit computation (LAB), and some were natural matrix samples collected from SWAS sites (SWAS NATURAL MA). Appendix 7 contains a second table containing summary analysis results, including the C_p statistic for characteristics for which specification limits could be ascertained. Precision on LAB samples was generally high; however, precision on some cations of some CRMs was frequently sub-standard ($C_p < 1.1$).

4.6 Systematic bias analysis based on CRMs

We used the sign test of the SAS procedure PROC UNIVARIATE to assess whether or not the measurement process was biased with respect to other labs, using the results and target values for the CRMs listed in ***Appendix 7 - Lab QC results***. The test statistic M is calculated as

$$M = \frac{n^+ - n^-}{2}$$

where n^+ is the number of observations greater than μ_0 and n^- is the number of observations less than μ_0, where an observation is the sign of the difference between the lab results and the CRM target value. In this case we chose μ_0=0. See the SAS documentation for details of the computation of the p-value. Given the number of tests, we would take a p-value less that 0.005 as evidence of systematic bias. However, for small N, the potential for either a Type I or Type II error is such that we would not want to place too much weight on any results where N is much less than 10. Table 9 indicates that the only result of concern is that for potassium, which has a significant p-value but only nine observations. However, all of them were less than their respective targets.

Table 9: Systematic bias analysis

EPA STORET Name	N	M	p-value
Aluminum, Organic + Inorganic Monomeric (reactive aluminum)	2	-1	0.5000
Aluminum, Organic Monomeric (reactive aluminum)	1	0.5	1.0000
Calcium	11	0.5	1.0000
Chloride	12	1	0.7744
Magnesium	12	3	0.1460
Nitrogen, Nitrate (NO3) as NO3	11	-0.5	1.0000
Nitrogen, ammonium (NH4) as NH4	4	-2	0.1250
Potassium	9	-4.5	0.0039
Silica	6	1	0.6875
Sodium	11	1.5	0.5488
Sulfur, sulfate (SO4) as SO4	12	1	0.7744

4.7 Collaborative study results for precision and systematic bias

The program laboratory at the Department of Environmental Sciences at the University of Virginia participates in inter-laboratory quality assurance (QA) studies administered by Environment Canada's National Water Research Institute (NWRI). Environmental programs in both the United States and Canada participate in these studies which are designed for laboratories analyzing acid rain and surface waters. The purpose of these QA studies is to provide a useful means of quantifying laboratory performance and data quality. The QA report for each study includes an assessment of any systematic bias and indicates any results flagged as a result of poor precision. A bias of greater than 5% is considered excessive by NWRI for most parameters in the studies. A result is flagged if its value is beyond that of the median (target) plus or minus the acceptable difference. The acceptable difference is calculated by NWRI using the following formula:

(Target - LLBAE) x CEI + BAE, where

LLBAE = Lower Limit for use of Basic Acceptable Error
CEI = Concentration Error Increment
BAE = Basic Acceptable Error
(The values for these terms are determined by NWRI.)

Each study consists of ten samples, which are analyzed by the project laboratory by the same means as the project samples and usually included in analysis sessions along with project samples. The analysis results are then reported to the NWRI. We report results for the studies in which the project laboratory has participated to date in Table 10.

Table 10: Project Laboratory Results for NWRI Inter-laboratory Quality Assurance Studies

Study Date	pH - manual	pH- titrator	specific conductance	Alkalinity – manual (2-point)	Alkalinity – titrator (11 point)	chloride	nitrate	sulfate	ammonia	reactive silica	sodium	potassium	calcium	magnesium	Dissolved organic carbon	
10-MAY-94	A	N	A	N	N	A	A	A	A	A	A	A	A	A	N	
15-JAN-95	A	N	1	A	N	2	A	A	A	3	A	A	A	4	N	
05-SEP-95	A	N	A	A	N	A	A	A	N	A	A	A	A	A	N	
01-SEP-96	A	N	A	A	N	A	A	A	A	A	5	A	A	A	N	
02-SEP-97	A	N	A	A	N	A	A	A	A	A	A	A	A	A	N	
01-SEP-98	A	N	A	A	N	A	A	A	6	A	A	A	A	A	N	
01-SEP-99	A	N	A	A	N	A	A	A	7	A	A	A	A	A	N	
28-AUG-00	A	N	A	A	N	A	A	A	A	8	A	A	A	A	N	
27-AUG-01	A	N	A	A	N	A	A	A	9	10	A	A	A	11	N	
03-SEP-02	A	N	12	A	N	A	A	A	A	13	A	A	A	A	N	
01-JUN-04	A	N	A	A	N	A	A	A	A	A	A	A	A	A	N	
01-DEC-05	A	N	A	A	N	A	A	A	A	A	A	A	A	A	N	
01-DEC-06	14	A	A	A	A	A	A	A	A	A	A	A	A	A	N	
01-DEC-07	N	A	15	N	A	A	A	A	A	A	A	A	A	A	A	
Defects	1	0	3	0	0	1	0	0	3	4	1	0	0	2	0	15
Total	13	2	14	12	2	14	14	14	13	14	14	14	14	14	1	169

Notes:

A) Acceptable

N) No results

1) Although no results are flagged, ranking indicates a slight bias low.
2) Although no results are flagged, ranking indicates a slight bias low. After these results were submitted, the ion chromatography column used for chloride analyses was replaced.
3) Acceptable, except for high on one out of ten samples.
4) Although no results are flagged, ranking indicates a slight bias high.
5) Flagged very high on one out of ten samples. This was due to a calculation error made after analysis.
6) Two out of 10 samples flagged: one extremely low, one low.
7) Two out of 10 samples flagged: both very low.
8) Flagged extremely low on one sample out of 10.

9) Three out of 10 samples flagged: one extremely low, one very low, and one low.
10) Satisfactory, except for low on one out of 10 samples.
11) Flagged extremely high on one sample out of 10.
12) Four out of 10 samples flagged low. Ranking indicates a low bias: -4.64%, blank – 0.3536.
13) Two out of 10 samples flagged: one very low, one low.
14) Ranking indicates a high bias: 8.50%, blank: -0.4069.
15) Ranking indicates a low bias: -9.10%, blank: 0.3390. Four out of 10 samples flagged as low: three action flags and one warning flag.

4.8 Corrective actions

This section describes corrective actions that have been taken since the end of this reporting period (31 December 2007) and corrective actions, if any, that are anticipated as a result of this report, including plans for determining appropriate corrective actions.

4.8.1 Corrective actions taken during 2008

Field replicates are now collected weekly to increase the number of replicates used for calculations to estimate precision. This should make the precision estimate more accurate. In some cases it may possibly help to determine causes of poor precision.

Three check samples are now analyzed as part of every analytical run. These are prepared from NIST-traceable standards that are independent of the NIST-traceable standards used to prepare calibration standards:

1) A Detection Limit Quality Control Check Sample is analyzed prior to sample analysis for all procedures except pH, conductivity and ANC. This check sample consists of analytes at a concentration of 4 – 6 times the method detection limit objective. The value obtained must be within specified limits (true value plus or minus the method detection limit objective) before sample analysis begins.

2) A Calibration Quality Control Check Sample is analyzed for all procedures except pH, conductivity and ANC. This check sample is analyzed before and after sample analysis and periodically throughout the analytical run. The value

obtained must be within specified limits (true value plus or minus the precision objective).

3) A Method Detection Limit Standard Solution is analyzed for all procedures except pH, conductivity, and ANC. This solution consists of analytes at a concentration of 2 – 3 times the method detection limit objective. It is analyzed at least once per analytical run and is used to estimate the laboratory's actual method detection limit.

The range of calibration standards was examined to see how well it fit the expected concentration range for typical stream samples. Where appropriate, the range was changed to better bracket the expected concentrations. For anions, cations, silica and aluminum, an additional calibration standard was added at the low end to improve precision for low-level concentrations.

4.8.2 Charge ratio variability – Source Waters and VTSSS projects

Looking over the period of record, the charge ratio for certain sites is consistently high which indicates the probability of unmeasured ions, instead of indicating analytical problems. Comparing these sites to others with charge ratios closer to one may not be informative of overall data quality. This may indicate a need to establish project-specific charge ratio specification limits.

4.8.3 Ammonium and nitrate precision

Ammonium and nitrate analyses did not meet precision objectives during this reporting period. Precision is assessed by using field replicates in which two samples bottles are collected, one after the other, by the field collector. The appropriateness of using field replicates to assess precision will be examined. The assumption that the two replicate bottles contain the same analyte concentrations will be tested by analyzing replicate aliquots from each bottle. Aliquot replicates will be compared with bottle replicates to determine if the source of poor precision is the analytical technique or the field replicate collection process.

4.8.4 Trip blank bias

A Laboratory Blank is now analyzed prior to sample analysis for all procedures except pH, conductivity and ANC. The value obtained must be less than the specified method detection limit before sample analysis begins. The Laboratory Blank values will be compared with the Trip Blank values to check for contamination.

At the time that Trip Blanks are collected, a second Blank bottle will be prepared that is stored in the lab until the Trip Blank is analyzed. This will help determine if any contamination occurs during transport or storage.

4.8.5 CRM potassium bias

The bias found in potassium for analysis of Certified Reference Materials will be examined. Since a bias was not indicated by results given in Table 10 from participation in the NWRI Inter-laboratory Quality Assurance Studies, the CRM bias will be investigated. A new cation ion chromatography column is scheduled to be installed. The calibration standards for potassium have been adjusted to better match the expected concentrations, and an additional low-level standard has been added. Since most of the potassium CRM values are at the lower end of the calibration curve, this should help to improve quantification of low potassium concentrations.

The CRM program for all analytes will be reviewed. It is questionable whether the targets for some of the older CRMs are appropriate because they were established using a single lab. It is not unreasonable that two labs would be systematically different, yet still unbiased with respect to a group of labs.

5 Data Files and Appendices

Data files (other than this report and appendices) are listed and described in Table 11.

Table 11: Included files

File	Description
flow.xls	Daily discharge
schema of flow.xls	Column description of flow.xls
NPSTORET_1_70_Setup.exe	Installation program for NPSTORET
NPSTORETZIP 19_DEC_2008 15_10_26.ZIP	UVA surface water characteristic database as of 12/18/2008
installationdetails.doc	Installation instructions for NPSTORET.

UVA surface water characteristic data is maintained in NPSTORET. NPSTORET has been described by the National Park Service as follows:

"NPSTORET is a series of Microsoft Access XP templates that comprise a database allowing users to document water quality monitoring projects in a manner compatible with the National Water Quality Monitoring Council's core water quality data elements in a format amenable for upload to the Environmental Protection Agency's STORET database - which is the NPS' water quality data archive. User's can enter Projects, Stations, Metadata, and Results on their respective templates. A Reports & Statistics template allows users to generate reports, statistics, graphics, exports, and Google Earth display of entered data. Data import routines can be used to import users' own stations and results, as well as stations and results from the Environmental Protection Agency's STORET Data Warehouse, Legacy STORET, and the U.S. Geological Survey's National Water Information System. Taxa lists can also be imported for automatic characteristic definition. Context sensitive on-line help, overview videos, and other detailed documentation help users learn how to use NPSTORET."

Additional information about NPSTORET can be found at http://www.nature.nps.gov/water/infoanddata/index.cfm

To use the data provided with this report there are two options:

1) install NPSTORET and load the data from the zipfile referenced in Table 11. There are various functions in NPSTORET that permit the extraction of data to various formats, including Microsoft Excel.
2) Unzip the zipfile, which results in a Microsoft Access database, and construct queries using Microsoft access or some other software.

The database is not readonly, and contains preliminary data for dates beyond the end date of this report. Caution is advised when using preliminary data for analyses. Use of preliminary data in publications is discouraged. The following citation is suggested for referencing this data in reports, presentations, and publications:

Deviney, Jr., Frank A., James R. Webb, Suzanne W. Maben, Data Report for the Shenandoah Watershed Study, Virginia Trout Stream Sensitivity Study, and Related Programs, December, 2008, University of Virginia, Charlottesville, Virginia.

Appendices appear in related files. Adobe Acrobat Reader or equivalent software is required to read them.

Appendix 1 – Collection Sites

Appendix 2 - Projects Detailed, Sorted by ID

Appendix 3 – Analytical Procedures Detailed, Sorted by ID

Appendix 4 – MDLs and LQLs used

Appendix 5 – Precision Analysis – All

Appendix 6 - Trip Blank Summary Statistics - Period of Record

Appendix 7 - Lab QC results

Appendix 8 - Results Detailed

6 References

Hirsch, R.M. and Slack, J.R., 1984. A nonparametric trend test for seasonal data with serial dependence. *Water Resources Research*, 20(6), 727-732.

Montgomery, D.C., 1997, *Introduction to Statistical Quality Control, Third Edition*, John Wiley & Sons, Inc., New York.

Morrison, Marilyn, 1991, *Data User's Guide to the United States Environmental Protection Agency's Long-term Monitoring Project: Quality Assurance Plan and Data Dictionary*, Environmental Research Laboratory, EPA, Corvallis, OR.

Paulsen, Steve, 1997, *Environmental Monitoring and Assessment Program: Integrated Quality Assurance Project Plan for Surface Waters Research Activities*, National Health and Environmental Effects Research Laboratory, Western Ecology Division, EPA, Corvallis, OR.

Rantz, S. E., *et al.,* 1982. Measurement and computation of streamflow: Volume 1. Measurement of stage and discharge. *U.S. Geol. Surv. Water-Supply Paper 2175*, U.S. Geological Survey, Washington, DC.

Appendix 1: Stream collection sites visited during 2007

Organization	StationID	Station Name	County	HUC	Decimal Degrees Latitude	Latitude Direction	Decimal Degrees Longitude	Longitude Direction	Elevation	Elevation Units
SHEN	DR01	Deep Run at Route 708 bridge	ROCKINGHAM	02070005	38.2791	North	78.7636	West	1360	ft
SHEN	MAD2	MADISON RUN (upper)	ROCKINGHAM	02070005	38.2515	North	78.7463	West	1460	ft
SHEN	NFDR	NF OF THE DRY RUN at UVA gage on PATC property	PAGE	02070005	38.63372	North	78.35773	West	1600	ft
SHEN	PAIN	PAINE RUN at SHEN boundary and UVA gage	AUGUSTA	02070005	38.1986	North	78.7933	West	1390	ft
SHEN	PINE	PINEY RIVER at UVA gage	RAPPAHANNOCK	02080103	38.70176	North	78.26776	West	1180	ft
SHEN	SP1812	unnamed spring near Hightop	GREENE	02080204	38.33511	North	78.55217	West	.	
SHEN	SP1858	unnamed spring uphill of Byrd's Nest No. 3	PAGE	02070005	38.63651	North	78.32013	West	.	
SHEN	SP1864	unmapped spring just north of Dean Mountain Gap	ROCKINGHAM	02070005	38.3891	North	78.51361	West	.	
SHEN	SP1865	unmapped spring near Carson Mountain	WARREN	02080103	38.83355	North	78.17571	West	.	
SHEN	SP1870	Furnace Spring	PAGE	02070005	38.59736	North	78.37951	West	.	
SHEN	SP1876	Piney River Springbox	RAPPAHANNOCK	02080103	38.75911	North	78.27264	West	.	
SHEN	SP1883	spring near Indian Run Shelter	RAPPAHANNOCK	02080103	38.82743	North	78.1658	West	.	
SHEN	SP1884	Ivy Creek Spring	ALBEMARLE	02080204	38.26492	North	78.65435	West	.	
SHEN	SP1886	spring near Lewis Mountain Campground	PAGE	02070005	38.43293	North	78.4824	West	.	
SHEN	SP1912	unmapped spring near Swift Run Gap	ROCKINGHAM	02070005	38.35437	North	78.54887	West	.	
SHEN	SP196	Doyle River Spring	ALBEMARLE	02080204	38.25066	North	78.68279	West	.	
SHEN	SP3001	spring near Dickey Ridge	WARREN	02080103	38.87753	North	78.20454	West	.	
SHEN	SP3004	Piney River Springbox	RAPPAHANNOCK	02080103	38.75581	North	78.26876	West	.	
SHEN	SP3008	spring near Beahm's Gap	PAGE	02070005	38.69715	North	78.32255	West	.	
SHEN	SP3009	unmapped spring	GREENE	02080103	38.34428	North	78.31501	West	.	
SHEN	SP3011	spring near Shaver Hollow Shelter (dismantled)	PAGE	02070005	38.61857	North	78.3536	West	.	
SHEN	SP3013	Dekay spring box	PAGE	02070005	38.5876	North	78.38673	West	.	
SHEN	SP3014	White Oak Canyon spring	MADISON	02080103	38.59504	North	78.38155	West	.	
SHEN	SP3019	Colvin Spring	MADISON	02080103	38.49181	North	78.44901	West	.	
SHEN	SP3023	Black Rock Spring (upper)	ROCKINGHAM	02070005	38.20802	North	78.75215	West	.	
SHEN	SP3024	unmapped spring			.	North	.	West	.	
SHEN	SP3025	spring at head of Pond Ridge Branch	ALBEMARLE	02080204	38.15651	North	78.76633	West	.	
SHEN	SP39	Gravel Springs	RAPPAHANNOCK	02080103	38.764	North	78.23341	West	.	

Organization	StationID	Station Name	County	HUC	Decimal Degrees Latitude	Latitude Direction	Decimal Degrees Longitude	Longitude Direction	Elevation	Elevation Units
SHEN	SP4001	Spring at head of Jeremy's Run	PAGE	02070005	38.75864	North	78.30027	West	.	
SHEN	SP4002	unmapped spring along Old Rag Ridge Trail (upper)	MADISON	02080103	38.55772	North	78.30085	West	.	
SHEN	SP4003B	unmapped spring along Old Rag Ridge Trail (lower)	AUGUSTA	02070005	38.17743	North	78.78979	West	.	
SHEN	SP4004	Blackrock Springs	ALBEMARLE	02080204	38.20705	North	78.75207	West	.	
SHEN	SP47	Rock Spring	PAGE	02070005	38.55406	North	78.40866	West	.	
SHEN	SP50	Devil's Ditch Spring	GREENE	02080103	38.44394	North	78.47046	West	.	
SHEN	SP53	unmapped spring near Hightop Shelter	GREENE	02080204	38.33324	North	78.55943	West	.	
SHEN	SP58	Pinefield Shelter spring	GREENE	02080204	38.29079	North	78.6458	West	.	
SHEN	SP62	Black Rock spring	ROCKINGHAM	02070005	38.21439	North	78.74298	West	.	
SHEN	SP8	spring on trib just north of Sawmill Run Ranger Station	AUGUSTA	02070005	38.10909	North	78.8252	West	.	
SHEN	STAN	STAUNTON RIVER at UVA gage	MADISON	02080103	38.445	North	78.3712	West	1010	ft
SHEN	SW148	Happy Creek	WARREN	02070005	38.88744	North	78.19961	West	.	
SHEN	SW152	Smith Creek	WARREN	02070005	38.80819	North	78.19286	West	.	
SHEN	SW161	Compton Hollow	PAGE	02070005	38.76561	North	78.32364	West	.	
SHEN	SW165	Jeremys Run near Elkwallow Shelter	PAGE	02070005	38.7458	North	78.31247	West	.	
SHEN	SW179	Beech Spring Hollow	RAPPAHANNOCK	02080103	38.64289	North	78.28133	West	.	
SHEN	SW181	North Fork Dry Run	PAGE	02070005	38.62342	North	78.35416	West	.	
SHEN	SW182	Hazel River	RAPPAHANNOCK	02080103	38.61978	North	78.29342	West	.	
SHEN	SW183	Hughes River	RAPPAHANNOCK	02080103	38.6172	North	78.33492	West	.	
SHEN	SW192	Hughes River	MADISON	02080103	38.58408	North	78.31758	West	.	
SHEN	SW195	White Oak Canyon	MADISON	02080103	38.57956	North	78.37256	West	.	
SHEN	SW1L307	Lands Run (upper)	WARREN	02070005	38.82756	North	78.18797	West	.	
SHEN	SW1L313	Jeremys Run	PAGE	02070005	38.74894	North	78.32333	West	.	
SHEN	SW216	East Branch Naked Creek	PAGE	02070005	38.50394	North	78.44972	West	.	
SHEN	SW217	Mill Prong	MADISON	02080103	38.50247	North	78.4375	West	.	
SHEN	SW224	Staunton River	GREENE	02080103	38.46767	North	78.41864	West	.	
SHEN	SW227	Staunton River - McDaniel Hollow	GREENE	02080103	38.45764	North	78.40036	West	.	
SHEN	SW240	South River			38.37856	North	78.5095	West	.	
SHEN	SW251	Gap Run	ROCKINGHAM	02070005	38.32473	North	78.6389	West	.	
SHEN	SW257	Fork Hollow	GREENE	02080204	38.30095	North	78.61892	West	.	
SHEN	SW260	first right hand trib to Ivy Creek	GREENE	02080204	38.2795	North	78.63454	West	1400	
SHEN	SW279	Paine Run - Left Hand Hollow	AUGUSTA	02070005	38.20462	North	78.77982	West	.	

Organization	StationID	Station Name	County	HUC	Decimal Degrees Latitude	Latitude Direction	Decimal Degrees Longitude	Longitude Direction	Elevation	Elevation Units
SHEN	SW280	North Fork of Moormans River near 2190 ft elev	ALBEMARLE	02080204	38.20198	North	78.74718	West	2190	
SHEN	SW281	Paine Run source water near 1560 ft elev	AUGUSTA		38.198	North	78.77269	West	.	
SHEN	SW285	Cold Spring	AUGUSTA	02070005	38.20803	North	78.75208	West	.	
SHEN	SW287	Meadow Run	AUGUSTA	02080204	38.16289	North	78.78862	West	.	
SHEN	SW2L302	Hazel River	RAPPAHANNOCK	02080103	38.63028	North	78.29496	West	.	
SHEN	SW2L304	Hogcamp Branch	MADISON	02080103	38.52053	North	78.42236	West	.	
SHEN	SW2L308	North Fork Dry Run	PAGE	02070005	38.63164	North	78.35902	West	.	
SHEN	SW3F105	Lower Lewis Run			.	North	.	West	.	
SHEN	SW3L300	Paine Run	AUGUSTA	02070005	38.20927	North	78.75316	West	.	
SHEN	SW3L302	unknown location in Two Mile Run watershed			.	North	.	West	.	
SHEN	SWLIM1	White Oak Canyon	MADISON	02080103	38.57729	North	78.3713	West	.	
SHEN	VT36	MEADOW RUN	AUGUSTA	02070005	38.1587	North	78.8059	West	1480	ft
SHEN	VT51	JEREMYS RUN	PAGE	02070005	38.7155	North	78.3815	West	930	ft
SHEN	VT53	TWO MILE RUN	ROCKINGHAM	02070005	38.33388	North	78.67119	West	1220	ft
SHEN	VT58	BROKENBACK RUN	MADISON	02080103	38.5705	North	78.3044	West	1080	ft
SHEN	VT61	NORTH FORK THORNTON RIVER	RAPPAHANNOCK	02080103	38.69297	North	78.27406	West	1150	ft
SHEN	VT62	HAZEL RIVER	RAPPAHANNOCK	02080103	38.6162	North	78.26386	West	1080	ft
SHEN	VT66	ROSE RIVER	MADISON	02080103	38.51537	North	78.36775	West	1120	ft
SHEN	VT75	WHITE OAK CANYON RUN	MADISON	02080103	38.56728	North	78.36495	West	1120	ft
SHEN	WOR1	WHITE OAK RUN at UVA gage	ROCKINGHAM	02080204	38.249	North	78.7481	West	1480	ft
UVAVTSSS	BW01	BIG WILSON CREEK	GRAYSON		36.65458	North	81.49626	West	4345	ft
UVAVTSSS	BW06	BIG WILSON CREEK BELOW LITTLE WILSON	GRAYSON		36.63624	North	81.47141	West	3550	ft
UVAVTSSS	CC02	CABIN CREEK	GRAYSON		36.63141	North	81.51935	West	4332	ft
UVAVTSSS	M002	LAUREL BED CREEK	RUSSELL	06010101	36.98433	North	81.76123	West	3560	ft
UVAVTSSS	M003	LAUREL BED LAKE	TAZEWELL	06010101	36.9631	North	81.80016	West	3520	ft
UVAVTSSS	M004	RED BRANCH	RUSSELL	06010101	36.92773	North	81.84102	West	2480	ft
UVAVTSSS	MAR1	Right-hand Branch of Mare Run	BATH		38.02118	North	79.77422	West	2460	ft
UVAVTSSS	MAR2	Left-hand Branch of Mare Run	BATH		38.02116	North	79.7745	West	2460	ft
UVAVTSSS	MC01	MILL CREEK	GRAYSON		36.61902	North	81.47098	West	3363	ft
UVAVTSSS	PAN1	Left-hand Tributary of Panther Run	BATH		38.01712	North	79.76373	West	2100	ft
UVAVTSSS	PAN2	Main stem of Panther Run	BATH		38.01564	North	79.76537	West	2140	ft
UVAVTSSS	QB01	QUEBEC BRANCH	GRAYSON		36.64893	North	81.49433	West	3963	ft
UVAVTSSS	SK01	RAVENS RUN-UPPER	HIGHLAND		38.34148	North	79.61382	West	2907	ft

Organization	StationID	Station Name	County	HUC	Decimal Degrees Latitude	Latitude Direction	Decimal Degrees Longitude	Longitude Direction	Elevation	Elevation Units
UVAVTSSS	SK02	RAVENS RUN-LOWER	HIGHLAND		38.34266	North	79.61189	West	2882	ft
UVAVTSSS	VT01	HELTON CREEK	GRAYSON	06010102	36.64301	North	81.57074	West	4000	ft
UVAVTSSS	VT02	LEWIS FORK	GRAYSON	06010102	36.68866	North	81.51924	West	3620	ft
UVAVTSSS	VT03	FOX CREEK	GRAYSON	05050001	36.6963	North	81.52491	West	3580	ft
UVAVTSSS	VT04	LITTLE WILSON CREEK	GRAYSON	05050001	36.63791	North	81.47191	West	3500	ft
UVAVTSSS	VT05	RACCOON BRANCH	SMYTH	05050001	36.74587	North	81.42573	West	2740	ft
UVAVTSSS	VT06	ROWLAND CREEK	SMYTH	06010102	36.73483	North	81.56323	West	2585	ft
UVAVTSSS	VT07	COVE BRANCH	TAZEWELL	06010205	37.05497	North	81.4356	West	3050	ft
UVAVTSSS	VT08	ROARING FORK-UPPER	TAZEWELL	06010205	37.05374	North	81.43281	West	3050	ft
UVAVTSSS	VT09	ROARING FORK-LOWER	TAZEWELL	06010205	37.03504	North	81.48036	West	2180	ft
UVAVTSSS	VT10	LAUREL RUN	BATH	02080201	38.1649	North	79.67075	West	2380	ft
UVAVTSSS	VT11	MARE RUN	BATH	02080201	38.01929	North	79.76272	West	2030	ft
UVAVTSSS	VT12	PANTHER RUN	BATH	02080201	38.01868	North	79.7619	West	2030	ft
UVAVTSSS	VT14	LITTLE WILSON CREEK	BATH	02080201	37.9824	North	79.76602	West	1860	ft
UVAVTSSS	VT15	PORTERS CREEK	BATH	02080201	37.97428	North	79.77293	West	1980	ft
UVAVTSSS	VT16	N BR SIMPSON CREEK	ALLEGHANY	02080201	37.82046	North	79.67122	West	1400	ft
UVAVTSSS	VT18	BEARWALLOW RUN	HIGHLAND	05020004	38.53494	North	79.6347	West	3140	ft
UVAVTSSS	VT19	LOST RUN	HIGHLAND	05020004	38.53672	North	79.63346	West	3140	ft
UVAVTSSS	VT22	CORNELIUS CREEK	BOTETOURT	02080201	37.52879	North	79.55239	West	1460	ft
UVAVTSSS	VT23	FALLINGWATER CREEK	BOTETOURT	02080201	37.47002	North	79.59277	West	1660	ft
UVAVTSSS	VT24	SHAWVERS RUN	CRAIG	05050003	37.61559	North	80.16904	West	1860	ft
UVAVTSSS	VT25	COVE BRANCH	CRAIG	02080201	37.57353	North	80.12763	West	1840	ft
UVAVTSSS	VT26	PINE SWAMP BRANCH	GILES	05050002	37.42137	North	80.6054	West	2380	ft
UVAVTSSS	VT28	NF STONY CREEK	GILES	05050002	37.45991	North	80.54648	West	2740	ft
UVAVTSSS	VT29	WAR SPUR BRANCH	GILES	05050002	37.39546	North	80.47322	West	2320	ft
UVAVTSSS	VT31	NOBUSINESS CREEK	GILES	05050002	37.25451	North	80.87494	West	2410	ft
UVAVTSSS	VT32	LAUREL BRANCH OF STONY CREEK	GILES	05050002	37.38087	North	80.57751	West	3090	ft
UVAVTSSS	VT33	GUYS RUN	ROCKBRIDGE	02080202	37.93262	North	79.49497	West	1620	ft
UVAVTSSS	VT34	LAUREL RUN	ROCKBRIDGE	02080202	37.92876	North	79.45591	West	1270	ft
UVAVTSSS	VT37	NORTH RIVER	AUGUSTA	02070005	38.40155	North	79.28309	West	2660	ft
UVAVTSSS	VT38	RAMSEYS DRAFT	AUGUSTA	02080202	38.31587	North	79.35356	West	2320	ft
UVAVTSSS	VT39	KENNEDY CREEK	AUGUSTA	02070005	37.96254	North	79.01487	West	1840	ft
UVAVTSSS	VT40	MILLS CREEK	AUGUSTA	02070005	37.94044	North	79.00646	West	1980	ft
UVAVTSSS	VT41	ST MARYS RIVER-LOWER	AUGUSTA	02070005	37.92473	North	79.13585	West	1740	ft
UVAVTSSS	VT42	HUNTING CREEK	BEDFORD	02080203	37.53209	North	79.46669	West	1880	ft
UVAVTSSS	VT43	GREASY SPRING BRANCH	AMHERST	02080203	37.78784	North	79.15435	West	2460	ft
UVAVTSSS	VT44	GEORGES CREEK	AMHERST	02080203	37.75769	North	79.13027	West	1600	ft
UVAVTSSS	VT45	OTTER CREEK	AMHERST	02080201	37.64716	North	79.34842	West	1300	ft
UVAVTSSS	VT46	LITTLE COVE CREEK	AMHERST	02080203	37.72606	North	79.20044	West	1660	ft
UVAVTSSS	VT48	BIG MACK CREEK	PULASKI	05050001	36.95716	North	80.66008	West	2160	ft

Organization	StationID	Station Name	County	HUC	Decimal Degrees Latitude	Latitude Direction	Decimal Degrees Longitude	Longitude Direction	Elevation	Elevation Units
UVAVTSSS	VT49	LITTLE STONY CREEK-LOWER	SHENANDOAH	02070006	38.93818	North	78.64554	West	1530	ft
UVAVTSSS	VT50	LAUREL RUN	SHENANDOAH	02070006	38.91843	North	78.72866	West	1720	ft
UVAVTSSS	VT52	MORGAN RUN	PAGE	02070005	38.51913	North	78.67898	West	1600	ft
UVAVTSSS	VT54	GERMAN RIVER-UPPER	ROCKINGHAM	02070001	38.68226	North	79.06345	West	2500	ft
UVAVTSSS	VT56	WOLF RUN	ROCKINGHAM	02070005	38.42986	North	79.13984	West	1950	ft
UVAVTSSS	VT57	BLACK RUN-LOWER	ROCKINGHAM	02070005	38.50925	North	79.06586	West	1720	ft
UVAVTSSS	VT63	SHOE CREEK	NELSON	02080203	37.79062	North	79.10336	West	1420	ft
UVAVTSSS	VT64	CRABTREE CREEK	NELSON	02080203	37.85063	North	79.07852	West	1580	ft
UVAVTSSS	VT65	MEADOW CREEK	NELSON	02080203	37.8508	North	79.08071	West	1620	ft
UVAVTSSS	VT67	EF CHESTNUT CREEK-LOWER	CARROLL	05050001	36.57135	North	80.84787	West	2620	ft
UVAVTSSS	VT76	BELFAST CREEK	ROCKBRIDGE	02080201	37.57387	North	79.49016	West	1040	ft
UVAVTSSS	VT77	MATTS CREEK	BEDFORD	02080201	37.599	North	79.41442	West	840	ft
UVAVTSSS	VT78	LITTLE TUMBLING CREEK	TAZEWELL	06010205	36.94931	North	81.77266	West	2620	ft
UVAVTSSS	VT80	LITTLE STONY CREEK-UPPER	SHENANDOAH	02070006	38.94713	North	78.63576	West	1720	ft
UVAVTSSS	VT81	EF CHESTNUT CREEK-UPPER	GRAYSON	05050001	36.57339	North	80.848	West	2620	ft
UVAVTSSS	WB01	WILBURN BRANCH	GRAYSON		36.63739	North	81.47576	West	3563	ft

NPSTORET Projects

Shenandoah National Park ***Sorted by ID***

ID: SOURCH2O **Start Date:** 5/1/2007 **Duration:** ongoing

Name: Shenandoah Source Waters

Purpose: Characterize Threatened and Impaired Headwater Streams and Springs in Shenandoah National Park

Streams, springs, groundwater seeps and associated headwater, riparian and wetlands areas constitute unique and important resources in Shenandoah National Park (SHEN). They provide irreplaceable habitat for many aquatic and terrestrial organisms and contribute much to the essential experience of the park. Threats to these resources from atmospheric pollutants are well documented. Among these important water resources, the "source waters" (headwaters and springs) are potentially the most sensitive to impairment, yet the least well-understood. The goal of this project is to expand the water resource inventory and monitoring programs in SHEN from the lower stream reaches of the park to include these headwaters and springs, and to examine the newly identified threat from mercury deposition. The project implements recommendations in the Water Resources Scoping Report recently completed for SHEN and provides essential information for revision of the park's General Management Plan and for development and implementation of the park's GPRA goals.

Contact: Contact Info

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Virginia Trout Stream Sensitivity Study
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Study Area:

Design:

QA Plan:

Measurement QO:

Stations:	Visit Dates	# Obs.	Assigned to Project?
SP1812: unnamed spring near Hightop	10/12/2007	36	Yes
SP1858: unnamed spring uphill of Byrd's Nest No. 3	10/4/2007 - 4/9/2008	58	Yes
SP1864: unmapped spring just north of Dean Mountain Gap	10/3/2007 - 4/17/2008	40	Yes
SP1865: unmapped spring near Carson Mountain	10/9/2007 - 4/16/2008	40	Yes
SP1870: Furnace Spring	10/2/2007 - 4/17/2008	56	Yes
SP1876: Piney River Springbox	10/1/2007 - 4/15/2008	56	Yes
SP1883: spring near Indian Run Shelter	10/5/2007 - 4/16/2008	40	Yes
SP1884: Ivy Creek Spring	10/3/2007 - 4/14/2008	56	Yes
SP1886: spring near Lewis Mountain Campground	10/2/2007 - 4/15/2008	40	Yes
SP1895: Jeremy's Run Spring	4/15/2008	20	No
SP1898: unmapped spring	4/9/2008	20	No
SP1912: unmapped spring near Swift Run Gap	10/12/2007 - 4/17/2008	40	Yes
SP192: unmapped spring	4/15/2008	20	No
SP196: Doyle River Spring	10/3/2007	20	Yes
SP3001: spring near Dickey Ridge	10/5/2007 - 4/16/2008	56	Yes

NPSTORET Projects

Shenandoah National Park *Sorted by ID*

Stations:	Visit Dates	# Obs.	Assigned to Project?
SP3004: Piney River Springbox	10/1/2007 - 4/16/2008	40	Yes
SP3008: spring near Beahm's Gap	10/15/2007 - 4/15/2008	40	Yes
SP3009: unmapped spring	10/9/2007 - 4/25/2008	72	Yes
SP3011: spring near Shaver Hollow Shelter (dismantled)	10/4/2007 - 4/25/2008	40	Yes
SP3013: Dekay spring box	10/16/2007 - 4/17/2008	56	Yes
SP3014: White Oak Canyon spring	10/2/2007 - 4/9/2008	40	Yes
SP3019: Colvin Spring	10/2/2007 - 5/1/2008	76	Yes
SP3023: Black Rock Spring (upper)	10/3/2007 - 4/8/2008	42	Yes
SP3023B: Black Rock Spring (lower)	4/8/2008	20	No
SP3024: unmapped spring	10/10/2007	21	Yes
SP3025: spring at head of Pond Ridge Branch	10/11/2007 - 4/10/2008	57	Yes
SP39: Gravel Springs	10/1/2007 - 4/16/2008	56	Yes
SP4001: Spring at head of Jeremy's Run	10/1/2007 - 4/15/2008	40	Yes
SP4002: unmapped spring along Old Rag Ridge Trail (upper)	10/4/2007 - 4/25/2008	40	Yes
SP4003B: unmapped spring along Old Rag Ridge Trail (lower)	10/10/2007 - 4/10/2008	42	Yes
SP4004: Blackrock Springs	10/10/2007 - 4/8/2008	41	Yes
SP47: Rock Spring	10/2/2007 - 4/7/2008	40	Yes
SP50: Devil's Ditch Spring	10/2/2007 - 4/15/2008	40	Yes
SP53: unmapped spring near Hightop Shelter	10/12/2007 - 4/17/2008	56	Yes
SP58: Pinefield Shelter spring	10/3/2007 - 4/15/2008	41	Yes
SP62: Black Rock spring	10/3/2007 - 4/8/2008	56	Yes
SP8: spring on trib just north of Sawmill Run Ranger Station	10/10/2007 - 4/14/2008	58	Yes
SW148: Happy Creek	5/25/2007 - 11/2/2007	54	Yes
SW152: Smith Creek	6/4/2007 - 10/20/2007	39	Yes
SW161: Compton Hollow	6/4/2007 - 11/2/2007	54	Yes
SW165: Jeremys Run near Elkwallow Shelter	5/30/2007 - 10/20/2007	55	Yes
SW179: Beech Spring Hollow	5/30/2007 - 10/28/2007	53	Yes
SW181: North Fork Dry Run	5/21/2007 - 10/28/2007	55	Yes
SW182: Hazel River	5/29/2007 - 10/19/2007	54	Yes
SW183: Hughes River	5/29/2007 - 10/13/2007	55	Yes
SW192: Hughes River	6/5/2007 - 10/13/2007	39	Yes
SW195: White Oak Canyon	5/23/2007 - 10/12/2007	39	Yes
SW1L307: Lands Run (upper)	5/25/2007 - 10/20/2007	39	Yes
SW1L313: Jeremys Run	5/30/2007 - 10/20/2007	39	Yes
SW216: East Branch Naked Creek	5/23/2007 - 10/12/2007	39	Yes
SW217: Mill Prong	5/23/2007 - 10/12/2007	55	Yes
SW224: Staunton River	6/5/2007 - 9/29/2007	54	Yes
SW227: Staunton River - McDaniel Hollow	6/4/2007 - 9/29/2007	39	Yes
SW240: South River	5/31/2007 - 10/9/2007	54	Yes
SW251: Gap Run	6/6/2007 - 10/7/2007	57	Yes
SW257: Fork Hollow	5/31/2007 - 10/9/2007	23	Yes
SW260: first right hand trib to Ivy Creek	5/31/2007 - 10/9/2007	59	Yes
SW279: Paine Run - Left Hand Hollow	5/28/2007 - 9/30/2007	40	Yes
SW280: North Fork of Moormans River near 2190 ft elev	6/1/2007 - 10/6/2007	72	Yes
SW281: Paine Run source water near 1560 ft elev	5/22/2007	20	Yes

NPSTORET Projects

Shenandoah National Park ***Sorted by ID***

Stations:	Visit Dates	# Obs.	Assigned to Project?
SW285: Cold Spring	5/24/2007 - 10/6/2007	42	Yes
SW287: Meadow Run	5/22/2007 - 10/6/2007	41	Yes
SW2L302: Hazel River	5/29/2007 - 10/19/2007	55	Yes
SW2L304: Hogcamp Branch	5/23/2007 - 10/12/2007	39	Yes
SW2L308: North Fork Dry Run	5/21/2007 - 10/13/2007	39	Yes
SW3F105: Lower Lewis Run	5/24/2007 - 9/30/2007	57	Yes
SW3L300: Paine Run	5/28/2007 - 9/30/2007	41	Yes
SW3L302: unknown location in Two Mile Run watershed	6/6/2007 - 10/7/2007	41	Yes
SWLIM1: White Oak Canyon	5/23/2007 - 10/12/2007	39	Yes

Characteristics:	Observation Dates	# Obs.	Assigned to Project?
Acid Neutralizing Capacity (ANC): ANC_Metrohm_Grab	5/21/2007 - 5/1/2008	161	Yes
Aluminum, Organic + Inorganic Monomeric (reactive aluminum): T_AL_TC_Grab	5/22/2007 - 10/11/2007	29	Yes
Aluminum, Organic Monomeric (reactive aluminum): O_AL_TC_Grab	5/24/2007 - 10/10/2007	3	Yes
Anion / Cation Ratio: IONRATIO_MET_IC2_GRAB	5/21/2007 - 5/1/2008	161	Yes
Anions, Sum of: SAA_MET_IC2_GRAB	5/21/2007 - 5/1/2008	161	Yes
Calcium: Ca_Ions_Grab	5/21/2007 - 5/1/2008	161	Yes
Carbon, organic: DOC_PHN_8K_PA_UVA_Grab	4/7/2008 - 5/1/2008	41	Yes
Carbon, organic: DOC_PHN_8K_UVA_Grab	9/29/2007 - 11/2/2007	77	Yes
Cations, Sum of: SBC_IC2_GRAB	5/21/2007 - 5/1/2008	161	Yes
Chloride: Cl_Ions_Grab	5/21/2007 - 5/1/2008	161	Yes
Flow, stream stage (choice list): flow_streamStage	5/21/2007 - 5/1/2008	132	Yes
Magnesium: Mg_Ions_Grab	5/21/2007 - 5/1/2008	161	Yes
Nitrogen, ammonium (NH4) as NH4: NH4_Ions_Grab	5/21/2007 - 5/1/2008	161	Yes
Nitrogen, Nitrate (NO3) as NO3: NO3_Ions_Grab	5/21/2007 - 5/1/2008	161	Yes
pH: pH_Metrohm_Grab	5/21/2007 - 5/1/2008	161	Yes
Potassium: K_Ions_Grab	5/21/2007 - 5/1/2008	161	Yes
Silica: SiO2_TC_Grab	5/21/2007 - 5/1/2008	161	Yes
Sodium: Na_Ions_Grab	5/21/2007 - 5/1/2008	161	Yes
Specific conductance: Cond_VWR_Manual_Grab	5/21/2007 - 5/1/2008	161	Yes
Sulfur, sulfate (SO4) as SO4: SO4_Ions_Grab	5/21/2007 - 5/1/2008	161	Yes
Temperature, water: Temp_Water_C	5/21/2007 - 5/1/2008	132	Yes
Turbidity severity (choice list): water_turbidity	5/21/2007 - 5/1/2008	132	Yes
Weather Condition (WMO Code 4501) (Choice List): weather	5/21/2007 - 5/1/2008	132	Yes

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Rick Webb, University of Virginia; Senior Scientist, Project Manager

Documents: Shenandoah Source Waters - final.pdf 10/14/2008

Citations:

ID: SWAS **Start Date:** 10/1/1979 **Duration:** ongoing

Name: Shenandoah Watershed Study

Purpose: Overview

The Shenandoah Watershed Study (SWAS) program has both scientific and resource management objectives. The underlying scientific objective of the SWAS program has been to improve understanding of hydro-biogeochemical processes and factors that govern ecosystem conditions in the mountain watersheds of the Shenandoah National Park (SHEN). This scientific objective complements a resource management objective that has been defined by the need to document and assess change that is occurring in SNP's ecosystems.

The SWAS program, together with associated SHEN components of the Virginia Trout Stream Sensitivity Study, maintains a hydrochemical information framework in support of long-term research, monitoring, and assessment in SHEN's relatively undisturbed watersheds. Most of the projects listed in this document have relied on information obtained through the SWAS program.

Current routine SWAS data collection includes a combination of quarterly and weekly waters quality sampling on 14 streams, continuous discharge measurement on 5 streams, and determination of precipitation amount and composition at 2 locations. Stream water monitoring is stratified based on SHEN bedrock. Annual water analysis data and data quality assurance reports are provided to SHEN Resource management.

Sponsor: National Park Service

Primary Collaborators: U.S. Geologicial Survey, U.S. Environmental Protection Agency, Virginia Department of Game and Inland Fisheries, Virginia Department of Game and Inland Fisheries, Virginia Department of Forestry, University of Maryland, Virginia Tech.

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Laboratory Manager: Suzanne Maben; sw2e@virginia.edu; 434-924-0589

Study Area: Entire park.

Design:

QA Plan:

Measurement QO:

Stations:	Visit Dates	# Obs.	Assigned to Project?
BIME01: Big Meadows	5/1/2008	20	Yes

NPSTORET Projects

Shenandoah National Park ***Sorted by ID***

Stations:	Visit Dates	# Obs.	Assigned to Project?
BR01: TRIB OF BIG RUN	4/6/2006	16	Yes
BR02: BIG RUN near old Big Run Shelter	5/28/1994	15	Yes
DR01: Deep Run at Route 708 bridge	11/2/1979 - 12/14/2008	21659	Yes
DR02: Deep Run near SHEN boundary	9/12/1987 - 7/30/1990	339	Yes
LUCK: LUCK RUN	3/29/1986 - 6/20/1995	6218	Yes
MAD1: MADISON RUN (lower)	9/29/1983 - 7/22/1993	6579	Yes
MAD2: MADISON RUN (upper)	3/31/1981 - 10/27/2008	9543	Yes
NFDR: NF OF THE DRY RUN at UVA gage on PATC property	3/12/1987 - 12/15/2008	17657	Yes
PAIN: PAINE RUN at SHEN boundary and UVA gage	8/14/1987 - 12/14/2008	23148	Yes
PINE: PINEY RIVER at UVA gage	10/21/1995 - 12/16/2008	19674	Yes
SHAF: trib to MADISON RUN near fire road and WOR parking	4/9/1981 - 2/2/1984	884	Yes
STAN: STAUNTON RIVER at UVA gage	9/4/1996 - 12/15/2008	12903	Yes
TRIB: trib to WHITE OAK RUN near UVA gage	12/3/1980 - 4/28/1986	687	Yes
WOR1: WHITE OAK RUN at UVA gage	11/2/1979 - 12/14/2008	21682	Yes
WOR2: WHITE OAK RUN downstream of site WOR1	10/16/1986 - 7/22/1993	5052	Yes
WOR3: WHITE OAK RUN just above Luck Run	3/29/1986 - 6/20/1995	6727	Yes
WORX: WHITE OAK RUN just below Luck Run	3/29/1986 - 12/4/1986	506	Yes
WORY: WHITE OAK RUN just downstream of UVA gage	10/23/1986 - 12/4/1986	98	Yes
WORZ: WHITE OAK RUN upstream of UVA gage	8/28/1987 - 7/22/1993	4444	Yes

Characteristics:	Observation Dates	# Obs.	Assigned to Project?
Acid Neutralizing Capacity (ANC): ANC_Metrohm_AutoStream	10/6/2006 - 12/13/2008	219	Yes
Acid Neutralizing Capacity (ANC): ANC_Metrohm_Grab	10/3/2006 - 12/16/2008	700	Yes
Acid Neutralizing Capacity (ANC): ANC_Manual_AutoStream	10/20/1995 - 10/28/2006	1542	Yes
Acid Neutralizing Capacity (ANC): ANC_Manual_Grab	11/2/1979 - 11/1/2006	7520	Yes
Aluminum, Organic + Inorganic Monomeric (reactive aluminum): T_AL_TC_AutoStream	10/20/1995 - 3/17/2007	743	Yes
Aluminum, Organic + Inorganic Monomeric (reactive aluminum): T_AL_TC_Grab	7/25/1995 - 12/26/2007	272	Yes
Aluminum, Organic Monomeric (reactive aluminum): O_AL_TC_AutoStream	3/19/1996 - 11/16/2006	51	Yes
Aluminum, Organic Monomeric (reactive aluminum): O_AL_TC_Grab	9/9/1997 - 11/5/2007	3	Yes
Anion / Cation Ratio: IONRATIO_2PT_IC2_AUTO	10/7/2005 - 10/28/2006	248	Yes
Anion / Cation Ratio: IONRATIO_2PT_IC1_AA_AUTO	10/20/1995 - 8/31/2005	1294	Yes
Anion / Cation Ratio: IONRATIO_2PT_IC2_GRAB	10/3/2005 - 11/1/2006	347	Yes
Anion / Cation Ratio: IONRATIO_2PT_IC1_AA_GRAB	7/14/1983 - 9/27/2005	6734	Yes
Anion / Cation Ratio: IONRATIO_2PT_TC_AA_GRAB	11/2/1979 - 7/7/1983	437	Yes
Anion / Cation Ratio: IONRATIO_MET_IC2_GRAB	10/3/2006 - 6/10/2008	527	Yes
Anion / Cation Ratio: IONRATIO_MET_IC2_AUTO	10/6/2006 - 5/15/2008	196	Yes
Anions, Sum of: SAA_MET_IC2_AUTO	10/6/2006 - 5/15/2008	196	Yes
Anions, Sum of: SAA_MET_IC2_GRAB	10/3/2006 - 6/10/2008	527	Yes
Anions, Sum of: SAA_2PT_IC2_AUTO	10/7/2005 - 10/28/2006	248	Yes
Anions, Sum of: SAA_2PT_IC1_AUTO	10/20/1995 - 8/31/2005	1294	Yes
Anions, Sum of: SAA_2PT_TC_GRAB	11/2/1979 - 7/7/1983	437	Yes
Anions, Sum of: SAA_2PT_IC2_GRAB	10/3/2005 - 11/1/2006	347	Yes
Anions, Sum of: SAA_2PT_IC1_GRAB	7/14/1983 - 9/27/2005	6734	Yes
Calcium: Ca_Ions_AutoStream	10/7/2005 - 12/13/2008	421	Yes

NPSTORET Projects

Shenandoah National Park *Sorted by ID*

Characteristics:	Observation Dates	# Obs.	Assigned to Project?
Calcium: Ca_AA_AutoStream	10/20/1995 - 8/31/2005	1294	Yes
Calcium: Ca_Ions_Grab	10/3/2005 - 12/16/2008	1015	Yes
Calcium: Ca_AA_Grab	11/2/1979 - 9/27/2005	7171	Yes
Carbon, organic: DOC_DC80_UMD_Grab	5/2/1995 - 6/6/2001	250	Yes
Carbon, organic: DOC_PHN_8K_PA_UVA_AutoStream	4/23/2008 - 10/25/2008	30	Yes
Carbon, organic: DOC_PHN_8K_PA_UVA_Grab	1/28/2008 - 12/9/2008	58	Yes
Carbon, organic: DOC_PHN_8K_UVA_Grab	4/24/2007 - 12/27/2007	54	Yes
Carbon, organic: DOC_PHN_8K_UMD_AutoStream	7/29/2001 - 7/5/2004	507	Yes
Carbon, organic: DOC_DC80_UMD_AutoStream	1/18/1996 - 6/23/2001	520	Yes
Carbon, organic: DOC_PHN_8K_UMD_Grab	7/31/2001 - 8/3/2004	198	Yes
Cations, Sum of: SBC_IC2_AUTO	10/7/2005 - 5/15/2008	398	Yes
Cations, Sum of: SBC_AA_GRAB	11/2/1979 - 9/27/2005	7171	Yes
Cations, Sum of: SBC_AA_AUTO	10/20/1995 - 8/31/2005	1294	Yes
Cations, Sum of: SBC_IC2_GRAB	10/3/2005 - 6/10/2008	842	Yes
Chloride: Cl_Ions_Grab	10/3/2005 - 12/16/2008	1015	Yes
Chloride: Cl_IC_Grab	7/14/1983 - 9/27/2005	6734	Yes
Chloride: Cl_Ions_AutoStream	10/7/2005 - 12/13/2008	421	Yes
Chloride: Cl_IC_AutoStream	10/20/1995 - 8/31/2005	1294	Yes
Chloride: Cl_TC_Grab	11/2/1979 - 7/7/1983	437	Yes
Data-logger operating voltage: voltage_solarLoad	4/18/2007 - 12/16/2008	443	Yes
Data-logger operating voltage: voltage_StevensClock	4/18/2007 - 12/16/2008	443	Yes
Discharge velocity: discharge velocity	6/6/2007 - 10/20/2008	55	Yes
Flow, stream stage (choice list): flow_streamStage	4/18/2007 - 12/16/2008	537	Yes
Magnesium: Mg_AA_AutoStream	10/20/1995 - 8/31/2005	1294	Yes
Magnesium: Mg_Ions_Grab	10/3/2005 - 12/16/2008	1015	Yes
Magnesium: Mg_AA_Grab	11/2/1979 - 9/27/2005	7171	Yes
Magnesium: Mg_Ions_AutoStream	10/7/2005 - 12/13/2008	421	Yes
Nitrogen, ammonium (NH4) as NH4: NH4_Ions_AutoStream	10/7/2005 - 12/13/2008	421	Yes
Nitrogen, ammonium (NH4) as NH4: NH4_TC_Grab500	9/23/1996 - 9/27/2005	370	Yes
Nitrogen, ammonium (NH4) as NH4: NH4_TC_Grab250	11/2/1979 - 9/27/2005	2411	Yes
Nitrogen, ammonium (NH4) as NH4: NH4_TC_AutoStream	9/4/1996 - 8/31/2005	1200	Yes
Nitrogen, ammonium (NH4) as NH4: NH4_Ions_Grab	10/3/2005 - 12/16/2008	1015	Yes
Nitrogen, Nitrate (NO3) as NO3: NO3_IC_Grab	7/14/1983 - 9/27/2005	6734	Yes
Nitrogen, Nitrate (NO3) as NO3: NO3_Ions_AutoStream	10/7/2005 - 12/13/2008	421	Yes
Nitrogen, Nitrate (NO3) as NO3: NO3_Ions_Grab	10/3/2005 - 12/16/2008	1015	Yes
Nitrogen, Nitrate (NO3) as NO3: NO3_TC_Grab	11/2/1979 - 7/7/1983	437	Yes
Nitrogen, Nitrate (NO3) as NO3: NO3_IC_AutoStream	10/20/1995 - 8/31/2005	1294	Yes
pH: pH_Metrohm_AutoStream	10/6/2006 - 12/13/2008	219	Yes
pH: pH_Metrohm_Grab	10/3/2006 - 12/16/2008	700	Yes
pH: pH_Manual_AutoStream	10/20/1995 - 10/28/2006	1542	Yes
pH: pH_Manual_Grab	11/2/1979 - 11/1/2006	7518	Yes
Potassium: K_Ions_AutoStream	10/7/2005 - 12/13/2008	421	Yes
Potassium: K_AA_Grab	11/2/1979 - 9/27/2005	7171	Yes
Potassium: K_AA_AutoStream	10/20/1995 - 8/31/2005	1294	Yes
Potassium: K_Ions_Grab	10/3/2005 - 12/16/2008	1015	Yes

Characteristics:	Observation Dates	# Obs.	Assigned to Project?
Precipitation Time Since Event: days_since_precip	4/18/2007 - 5/3/2007	19	Yes
Silica: SiO2_TC_AutoStream	10/20/1995 - 12/13/2008	1715	Yes
Silica: SiO2_TC_Grab	11/2/1979 - 12/16/2008	7996	Yes
Sodium: Na_Ions_AutoStream	10/7/2005 - 12/13/2008	421	Yes
Sodium: Na_Ions_Grab	10/3/2005 - 12/16/2008	1015	Yes
Sodium: Na_AA_AutoStream	10/20/1995 - 8/31/2005	1294	Yes
Sodium: Na_AA_Grab	11/2/1979 - 9/27/2005	7171	Yes
Solids, Total Suspended (TSS): Non-filterable Residue	1/29/1991 - 10/30/2006	101	Yes
Solids, Volatile: Volatile Residue	1/29/1991 - 10/30/2006	101	Yes
Specific conductance: Cond_YSI_Manual_AutoStream	10/20/1995 - 6/9/2003	848	Yes
Specific conductance: Cond_VWR_Manual_Grab	4/16/2002 - 12/16/2008	1755	Yes
Specific conductance: Cond_VWR_Manual_AutoStream	6/11/2003 - 12/13/2008	867	Yes
Specific conductance: Cond_YSI_Manual_Grab	11/2/1979 - 6/11/2003	6399	Yes
Sulfur, sulfate (SO4) as SO4: SO4_Ions_Grab	10/3/2005 - 12/16/2008	1015	Yes
Sulfur, sulfate (SO4) as SO4: SO4_Ions_AutoStream	10/7/2005 - 12/13/2008	421	Yes
Sulfur, sulfate (SO4) as SO4: SO4_IC_Grab	7/14/1983 - 9/27/2005	6734	Yes
Sulfur, sulfate (SO4) as SO4: SO4_TC_Grab	11/2/1979 - 7/7/1983	437	Yes
Sulfur, sulfate (SO4) as SO4: SO4_IC_AutoStream	10/20/1995 - 8/31/2005	1294	Yes
Temperature, water: Temp_Water_C	11/2/1979 - 12/16/2008	7529	Yes
Turbidity severity (choice list): water_turbidity	4/18/2007 - 12/16/2008	537	Yes
Water level reference point elevation: WatLev_Staff	4/18/2007 - 12/16/2008	443	Yes
Water level reference point elevation: WatLev_AXSYS	4/18/2007 - 12/16/2008	442	Yes
Water level reference point elevation: WatLev_Chart	4/18/2007 - 12/16/2008	443	Yes
Weather Condition (WMO Code 4501) (Choice List): weather	4/18/2007 - 12/16/2008	537	Yes

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Rick Webb, University of Virginia; Senior Scientist, Project Manager

Documents:

Citations:

ID: VTSSS **Start Date:** 10/1/1987 **Duration:** ongoing

Name: Virginia Trout Stream Sensitivity Study

Purpose: Overview

The broad objective of the Virginia Trout Stream Sensitivity Study (VTSSS) is to support assessment of change in the acid-base chemistry of surface waters following enactment of the Clean Air Act Amendments of 1990. The specific objective is to determine temporal trends and status changes in the acid-base chemistry of streams in the western Virginia region that support reproducing populations of the indigenous brook trout.

Sponsor: U.S. Environmental Protection Agency

Primary Collaborators: National Park Service, Virginia Department of Game and Inland Fisheries, USDA Forest Service,

Trout Unlimited

Contact: Contact Info
Shenandoah Watershed Study
Virginia Trout Stream Sensitivity Study
Department of Environmental Sciences
University of Virginia
Clark Hall, 291 McCormick Road
P.O. Box 4000123
Charlottesville, VA 22904-4123 USA

Project Co-Directors
James Galloway; jng@virginia.edu; 434-924-1303
Jack Cosby; bjc4a@virginia.edu; 434-924-7787

Project Staff
Projects Coordinator: Rick Webb; rwebb@virginia.edu; 540-468-2881; 540-290-0913 (c)
Database Manager: Frank Deviney; deviney@virginia.edu; 434-924-7817
Laboratory Manager: Suzanne Maben; sw2e@virginia.edu; 434-924-0589

Study Area: Current routine VTSSS data collection includes 51 streams in western Virginia that are sampled on a quarterly basis in conjunction with quarterly sampling in Shenandoah National Park (SHEN). The VTSSS program also supports episodic water quality sampling on 3 of the SWAS study streams within SHEN.

Design:

QA Plan:

Measurement QO:

Stations:	Visit Dates	# Obs.	Assigned to Project?
PAIN: PAINE RUN at SHEN boundary and UVA gage	7/30/1991 - 4/26/1995	284	Yes
VT36: MEADOW RUN	8/16/1987 - 10/29/2008	1720	Yes
VT51: JEREMYS RUN	8/16/1987 - 10/29/2008	1600	Yes
VT53: TWO MILE RUN	8/14/1987 - 10/29/2008	1664	Yes
VT58: BROKENBACK RUN	8/12/1987 - 10/30/2008	1622	Yes
VT59: STAUNTON RIVER	8/12/1987 - 4/27/1995	560	Yes
VT60: Piney River	8/12/1987 - 4/26/1995	561	Yes
VT61: NORTH FORK THORNTON RIVER	10/29/1987 - 10/29/2008	1555	Yes
VT62: HAZEL RIVER	8/12/1987 - 10/30/2008	1654	Yes
VT66: ROSE RIVER	4/24/1988 - 10/30/2008	1590	Yes
VT75: WHITE OAK CANYON RUN	7/31/1990 - 10/30/2008	1389	Yes

Characteristics:	Observation Dates	# Obs.	Assigned to Project?
Acid Neutralizing Capacity (ANC): ANC_Metrohm_Grab	10/25/2006 - 10/30/2008	81	Yes
Acid Neutralizing Capacity (ANC): ANC_Manual_Grab	8/12/1987 - 10/25/2006	766	Yes
Aluminum, Organic + Inorganic Monomeric (reactive aluminum): T_AL_TC_Grab	1/31/1994 - 1/28/2008	213	Yes
Aluminum, Organic Monomeric (reactive aluminum): O_AL_TC_Grab	1/31/1994 - 4/24/2003	78	Yes
Anion / Cation Ratio: IONRATIO_2PT_IC2_GRAB	10/26/2005 - 10/25/2006	44	Yes
Anion / Cation Ratio: IONRATIO_2PT_IC1_AA_GRAB	8/12/1987 - 7/31/2005	722	Yes
Anion / Cation Ratio: IONRATIO_MET_IC2_GRAB	10/25/2006 - 4/24/2008	63	Yes
Anions, Sum of: SAA_2PT_IC2_GRAB	10/26/2005 - 10/25/2006	44	Yes
Anions, Sum of: SAA_2PT_IC1_GRAB	8/12/1987 - 7/31/2005	722	Yes
Anions, Sum of: SAA_MET_IC2_GRAB	10/25/2006 - 4/24/2008	63	Yes

Characteristics:	Observation Dates	# Obs.	Assigned to Project?
Calcium: Ca_AA_Grab	8/12/1987 - 7/31/2005	722	Yes
Calcium: Ca_Ions_Grab	10/26/2005 - 10/30/2008	116	Yes
Cations, Sum of: SBC_IC2_GRAB	10/26/2005 - 4/24/2008	98	Yes
Cations, Sum of: SBC_AA_GRAB	8/12/1987 - 7/31/2005	722	Yes
Chloride: Cl_Ions_Grab	10/26/2005 - 10/30/2008	116	Yes
Chloride: Cl_IC_Grab	8/12/1987 - 7/31/2005	722	Yes
Flow, stream stage (choice list): flow_streamStage	4/24/2007 - 10/30/2008	56	Yes
Magnesium: Mg_AA_Grab	8/12/1987 - 7/31/2005	722	Yes
Magnesium: Mg_Ions_Grab	10/26/2005 - 10/30/2008	116	Yes
Nitrogen, ammonium (NH4) as NH4: NH4_Ions_Grab	10/26/2005 - 10/30/2008	116	Yes
Nitrogen, Nitrate (NO3) as NO3: NO3_Ions_Grab	10/26/2005 - 10/30/2008	116	Yes
Nitrogen, Nitrate (NO3) as NO3: NO3_IC_Grab	8/12/1987 - 7/31/2005	722	Yes
pH: pH_Manual_Grab	8/12/1987 - 10/25/2006	766	Yes
pH: pH_Metrohm_Grab	10/25/2006 - 10/30/2008	81	Yes
Potassium: K_Ions_Grab	10/26/2005 - 10/30/2008	116	Yes
Potassium: K_AA_Grab	8/12/1987 - 7/31/2005	722	Yes
Precipitation Time Since Event: days_since_precip	4/24/2007 - 4/26/2007	8	Yes
Silica: SiO2_TC_Grab	8/12/1987 - 10/30/2008	838	Yes
Sodium: Na_AA_Grab	8/12/1987 - 7/31/2005	722	Yes
Sodium: Na_Ions_Grab	10/26/2005 - 10/30/2008	116	Yes
Solids, Total Suspended (TSS): Non-filterable Residue	1/29/1991 - 10/25/2006	626	Yes
Solids, Volatile: Volatile Residue	1/29/1991 - 10/25/2006	626	Yes
Specific conductance: Cond_YSI_Manual_Grab	8/12/1987 - 4/24/2003	639	Yes
Specific conductance: Cond_VWR_Manual_Grab	7/31/2003 - 10/30/2008	199	Yes
Sulfur, sulfate (SO4) as SO4: SO4_Ions_Grab	10/26/2005 - 10/30/2008	116	Yes
Sulfur, sulfate (SO4) as SO4: SO4_IC_Grab	8/12/1987 - 7/31/2005	722	Yes
Temperature, water: Temp_Water_C	7/30/1990 - 10/30/2008	650	Yes
Turbidity severity (choice list): water_turbidity	4/24/2007 - 10/30/2008	56	Yes
Weather Condition (WMO Code 4501) (Choice List): weather	4/24/2007 - 10/30/2008	56	Yes

Staff: James Atkinson, Shenandoah National Park; Biologist
David Demarest, Shenandoah National Park; Biologist
Frank A. Deviney, Jr., University of Virginia; Engineer, Data Administrator, Staff Scientist
Liz Garcia, Shenandoah National Park; Technician
Suzanne Maben, University of Virginia; Chemist, Staff/Employee
Jim Schaberl, Shenandoah National Park; Project Manager
Rick Webb, University of Virginia; Senior Scientist, Project Manager

Documents:

Citations:

Number of Projects for Shenandoah National Park:3

University of Virginia non-NPS watersheds *Sorted by ID*

ID: VTSSS **Start Date:** 10/1/1987 **Duration:** ongoing

Name: Virginia Trout Stream Sensitivity Study

Purpose: Overview

The broad objective of the Virginia Trout Stream Sensitivity Study (VTSSS) is to support assessment of change in the acid-base chemistry of surface waters following enactment of the Clean Air Act Amendments of 1990. The specific objective is to determine temporal trends and status changes in the acid-base chemistry of streams in the western Virginia region that support reproducing populations of the indigenous brook trout.

Sponsor: U.S. Environmental Protection Agency

Primary Collaborators: National Park Service, Virginia Department of Game and Inland Fisheries, USDA Forest Service, Trout Unlimited

Contact: Contact Info

Shenandoah Watershed Study
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Project Staff
Projects Coordinator: Rick Webb; rwebb@virginia.edu; 540-468-2881; 540-290-0913 (c)
Database Manager: Frank Deviney; deviney@virginia.edu; 434-924-7817
Laboratory Manager: Suzanne Maben; sw2e@virginia.edu; 434-924-0589

Study Area:

Design:

QA Plan:

Measurement QO:

Stations:	Visit Dates	# Obs.	Assigned to Project?
LR01: LAUREL RUN	3/21/1995	15	Yes
M001: KELSO SPRING BR	11/14/1992	15	Yes
M002: LAUREL BED CREEK	1/13/1993 - 7/28/2008	861	Yes
M003: LAUREL BED LAKE	1/13/1993 - 10/27/2008	853	Yes
M004: RED BRANCH	1/18/1993 - 10/27/2008	706	Yes
M011: PETERS MILL RUN	4/1/1993	14	Yes
M012: PETERS MILL RUN	4/1/1993	14	Yes
M013: TRIB TO LITTLE RIVER	11/8/1991	14	Yes
M016: BEARWALLOW RUN-LAUREL FK	7/21/1991	15	Yes
M017: U,R,BR COMPTON BR-WALDEN	11/7/1991	14	Yes
M018: TRIB OF HESSE CREEK	11/8/1991	14	Yes
M020: LOST RUN OF LAUREL FORK	7/21/1991	15	Yes
M021: HUSKY BR OF DBL BR-REED C	11/7/1991	14	Yes
M024: LONG BR - WALDEN CREEK	11/7/1991	14	Yes
M026: BEAVER POND-UP BEARWALLOW	7/28/1991	16	Yes
M027: U,L,B-DBL BR OF REED CR	11/7/1991	14	Yes
M029: U,R,BR DBL BR OF REED CR	11/7/1991	14	Yes

NPSTORET Projects

University of Virginia non-NPS watersheds *Sorted by ID*

Stations:	Visit Dates	# Obs.	Assigned to Project?
M031: WHITE OAK RUN TRIB	5/2/1989	14	Yes
M032: BIG COVE BRANCH(JAMES R)	4/29/1991	15	Yes
M033: ROCKY ROW RIVER	4/26/1989	14	Yes
M034: SNOW CREEK	1/30/1991	15	Yes
M035: PETERS CREEK	1/30/1991	15	Yes
M036: E.FORK-ELK CREEK (UPPER)	1/30/1991	15	Yes
M037: SULPHUR SPRING CREEK	1/30/1991	15	Yes
M038: BIG HELLGATE CREEK	1/30/1991	15	Yes
M039: LITTLE HELLGATE CREEK	1/30/1991	15	Yes
M041: U,L,B COMPTON BR-WALDEN C	11/7/1991	14	Yes
M042: ST. MARY'S RIVER	6/16/1992	15	Yes
M043: ST. MARY'S RIVER	6/16/1992	15	Yes
M044: ST. MARY'S RIVER	6/16/1992	15	Yes
M045: ST. MARY'S RIVER	6/16/1992	15	Yes
M046: ST. MARY'S RIVER	6/16/1992	15	Yes
M047: ST. MARY'S RIVER	6/16/1992	14	Yes
NB01: NOBUSINESS CREEK	6/14/1995	16	Yes
RF01: ROARING FORK	11/7/2004	29	Yes
SMR1: ST. MARY'S RIVER	6/21/1988 - 12/27/1993	3957	Yes
SY21: LITTLE LAUREL CREEK	5/27/2002	15	Yes
VT01: HELTON CREEK	9/21/1987 - 10/29/2008	1405	Yes
VT02: LEWIS FORK	9/22/1987 - 10/29/2008	1429	Yes
VT03: FOX CREEK	9/22/1987 - 10/29/2008	1392	Yes
VT04: LITTLE WILSON CREEK	9/21/1987 - 10/29/2008	1381	Yes
VT05: RACCOON BRANCH	9/21/1987 - 10/29/2008	1436	Yes
VT06: ROWLAND CREEK	9/22/1987 - 10/29/2008	1393	Yes
VT07: COVE BRANCH	9/17/1987 - 10/28/2008	1233	Yes
VT08: ROARING FORK-UPPER	9/17/1987 - 10/28/2008	1249	Yes
VT09: ROARING FORK-LOWER	9/17/1987 - 10/28/2008	1348	Yes
VT10: LAUREL RUN	8/31/1987 - 10/28/2008	1457	Yes
VT11: MARE RUN	8/26/1987 - 10/28/2008	1444	Yes
VT12: PANTHER RUN	8/26/1987 - 10/28/2008	1446	Yes
VT13: BEAR HOLE	8/30/1987 - 10/27/1993	364	Yes
VT14: LITTLE WILSON CREEK	8/26/1987 - 10/28/2008	1369	Yes
VT15: PORTERS CREEK	8/26/1987 - 10/28/2008	1400	Yes
VT16: N BR SIMPSON CREEK	8/26/1987 - 10/27/2008	1471	Yes
VT17: BLUE SUCK BRANCH	8/26/1987 - 10/27/1993	405	Yes
VT18: BEARWALLOW RUN	8/31/1987 - 10/30/2008	1355	Yes
VT19: LOST RUN	8/31/1987 - 10/30/2008	1366	Yes
VT20: HIPES BRANCH	8/25/1987 - 11/2/1993	392	Yes
VT21: STONY RUN	8/25/1987 - 11/2/1993	449	Yes
VT22: CORNELIUS CREEK	9/23/1987 - 10/27/2008	1392	Yes
VT23: FALLINGWATER CREEK	9/23/1987 - 10/28/2008	1467	Yes
VT24: SHAWVERS RUN	9/4/1987 - 10/30/2008	1437	Yes
VT25: COVE BRANCH	9/4/1987 - 10/30/2008	1446	Yes

NPSTORET Projects

University of Virginia non-NPS watersheds *Sorted by ID*

Stations:	Visit Dates	# Obs.	Assigned to Project?
VT26: PINE SWAMP BRANCH	9/16/1987 - 11/3/2008	1480	Yes
VT27: NETTLE HOLLOW	10/27/1987 - 10/26/1993	406	Yes
VT28: NF STONY CREEK	10/27/1987 - 11/3/2008	1411	Yes
VT29: WAR SPUR BRANCH	9/15/1987 - 11/3/2008	1405	Yes
VT30: PEARIS THOMPSON BR	9/17/1987 - 10/26/1993	420	Yes
VT31: NOBUSINESS CREEK	9/17/1987 - 10/28/2008	1493	Yes
VT32: LAUREL BRANCH OF STONY CREEK	10/27/1987 - 11/3/2008	1409	Yes
VT33: GUYS RUN	10/25/1987 - 10/28/2008	1315	Yes
VT34: LAUREL RUN	8/26/1987 - 10/28/2008	1374	Yes
VT37: NORTH RIVER	8/30/1987 - 10/28/2008	1450	Yes
VT38: RAMSEYS DRAFT	8/30/1987 - 10/30/2008	1448	Yes
VT39: KENNEDY CREEK	8/22/1987 - 10/27/2008	1479	Yes
VT40: MILLS CREEK	8/22/1987 - 10/27/2008	1303	Yes
VT41: ST MARYS RIVER-LOWER	8/25/1987 - 10/28/2008	1435	Yes
VT42: HUNTING CREEK	10/30/1987 - 10/27/2008	1380	Yes
VT43: GREASY SPRING BRANCH	9/1/1987 - 10/26/2008	1423	Yes
VT44: GEORGES CREEK	9/1/1987 - 10/26/2008	1420	Yes
VT45: OTTER CREEK	9/24/1987 - 10/26/2008	1332	Yes
VT46: LITTLE COVE CREEK	9/24/1987 - 10/27/2008	1378	Yes
VT47: TERRAPIN CREEK	9/23/1987 - 10/30/1993	419	Yes
VT48: BIG MACK CREEK	9/23/1987 - 10/30/2008	1481	Yes
VT49: LITTLE STONY CREEK-LOWER	8/17/1987 - 10/28/2008	1399	Yes
VT50: LAUREL RUN	8/17/1987 - 10/27/2008	1504	Yes
VT52: MORGAN RUN	8/16/1987 - 7/25/2008	1518	Yes
VT54: GERMAN RIVER-UPPER	8/18/1987 - 10/29/2008	1375	Yes
VT55: BEECH LICK RUN	8/18/1987 - 10/27/1993	348	Yes
VT56: WOLF RUN	8/30/1987 - 10/28/2008	1464	Yes
VT57: BLACK RUN-LOWER	8/18/1987 - 10/28/2008	1435	Yes
VT63: SHOE CREEK	9/1/1987 - 10/26/2008	1406	Yes
VT64: CRABTREE CREEK	9/1/1987 - 10/27/2008	1362	Yes
VT65: MEADOW CREEK	9/1/1987 - 10/27/2008	1417	Yes
VT67: EF CHESTNUT CREEK-LOWER	10/27/1988 - 10/27/2008	1333	Yes
VT68: ST MARYS RIVER-UPPER	6/21/1988 - 10/28/1993	322	Yes
VT69: CHIMNEY BR (SMR)	6/21/1988 - 10/28/1993	337	Yes
VT70: BEAR BRANCH (SMR)	6/21/1988 - 10/28/1993	323	Yes
VT71: MINE BANK CR (SMR)	6/21/1988 - 10/28/1993	337	Yes
VT72: HOGBACK BR (SMR)	6/21/1988 - 7/28/1993	160	Yes
VT73: SUGARTREE BR (SMR)	6/21/1988 - 10/28/1993	337	Yes
VT74: ST MARYS R-MIDDLE	6/21/1988 - 10/28/1993	308	Yes
VT76: BELFAST CREEK	4/27/1989 - 10/28/2008	1170	Yes
VT77: MATTS CREEK	1/30/1991 - 10/27/2008	1151	Yes
VT78: LITTLE TUMBLING CREEK	4/24/1991 - 10/27/2008	1158	Yes
VT80: LITTLE STONY CREEK-UPPER	7/29/1998 - 10/28/2008	781	Yes
VT81: EF CHESTNUT CREEK-UPPER	4/27/2001 - 10/27/2008	502	Yes
WS01: WARSPUR BRANCH	3/21/1995	15	Yes

Characteristics:	Observation Dates	# Obs.	Assigned to Project?
Acid Neutralizing Capacity (ANC): ANC_Manual_Grab	8/16/1987 - 10/31/2006	5026	Yes
Acid Neutralizing Capacity (ANC): ANC_Metrohm_Grab	1/26/2006 - 11/3/2008	538	Yes
Aluminum, Organic + Inorganic Monomeric (reactive aluminum): T_AL_TC_Grab	1/25/1994 - 1/29/2008	1479	Yes
Aluminum, Organic Monomeric (reactive aluminum): O_AL_TC_Grab	1/25/1994 - 10/30/2007	665	Yes
Anion / Cation Ratio: IONRATIO_2PT_IC2_GRAB	10/24/2005 - 10/31/2006	298	Yes
Anion / Cation Ratio: IONRATIO_2PT_IC1_AA_GRAB	8/16/1987 - 8/1/2005	4727	Yes
Anion / Cation Ratio: IONRATIO_MET_IC2_GRAB	1/26/2006 - 4/30/2008	419	Yes
Anions, Sum of: SAA_MET_IC2_GRAB	1/26/2006 - 4/30/2008	419	Yes
Anions, Sum of: SAA_2PT_IC2_GRAB	10/24/2005 - 10/31/2006	298	Yes
Anions, Sum of: SAA_2PT_IC1_GRAB	8/16/1987 - 8/1/2005	4727	Yes
Calcium: Ca_Ions_Grab	10/24/2005 - 11/3/2008	774	Yes
Calcium: Ca_AA_Grab	8/16/1987 - 8/1/2005	4727	Yes
Cations, Sum of: SBC_IC2_GRAB	10/24/2005 - 4/30/2008	655	Yes
Cations, Sum of: SBC_AA_GRAB	8/16/1987 - 8/1/2005	4727	Yes
Chloride: Cl_IC_Grab	8/16/1987 - 8/1/2005	4727	Yes
Chloride: Cl_Ions_Grab	10/24/2005 - 11/3/2008	774	Yes
Flow, stream stage (choice list): flow_streamStage	4/24/2007 - 11/3/2008	391	Yes
General Observation (text): general_observation	7/25/2007 - 11/3/2008	334	Yes
Magnesium: Mg_AA_Grab	8/16/1987 - 8/1/2005	4727	Yes
Magnesium: Mg_Ions_Grab	10/24/2005 - 11/3/2008	774	Yes
Nitrogen, ammonium (NH4) as NH4: NH4_Ions_Grab	10/24/2005 - 11/3/2008	774	Yes
Nitrogen, ammonium (NH4) as NH4: NH4_TC_Grab250	5/21/1990 - 12/27/1993	186	Yes
Nitrogen, ammonium (NH4) as NH4: NH4_TC_Grab500	7/28/1991	3	Yes
Nitrogen, Nitrate (NO3) as NO3: NO3_Ions_Grab	10/24/2005 - 11/3/2008	774	Yes
Nitrogen, Nitrate (NO3) as NO3: NO3_IC_Grab	8/16/1987 - 8/1/2005	4727	Yes
pH: pH_Metrohm_Grab	1/26/2006 - 11/3/2008	538	Yes
pH: pH_Manual_Grab	8/16/1987 - 10/31/2006	5025	Yes
Potassium: K_Ions_Grab	10/24/2005 - 11/3/2008	774	Yes
Potassium: K_AA_Grab	8/16/1987 - 8/1/2005	4727	Yes
Precipitation Time Since Event: days_since_precip	4/24/2007 - 5/7/2007	57	Yes
Silica: SiO2_TC_Grab	8/16/1987 - 11/3/2008	5499	Yes
Sodium: Na_AA_Grab	8/16/1987 - 8/1/2005	4727	Yes
Sodium: Na_Ions_Grab	10/24/2005 - 11/3/2008	774	Yes
Specific conductance: Cond_VWR_Manual_Grab	1/28/2002 - 11/3/2008	1280	Yes
Specific conductance: Cond_YSI_Manual_Grab	8/16/1987 - 5/1/2003	4220	Yes
Sulfur, sulfate (SO4) as SO4: SO4_IC_Grab	8/16/1987 - 8/1/2005	4727	Yes
Sulfur, sulfate (SO4) as SO4: SO4_Ions_Grab	10/24/2005 - 11/3/2008	774	Yes
Temperature, water: Temp_Water_C	6/21/1988 - 11/3/2008	4350	Yes
Turbidity severity (choice list): water_turbidity	4/24/2007 - 11/3/2008	391	Yes
Weather Condition (WMO Code 4501) (Choice List): weather	4/24/2007 - 11/3/2008	391	Yes

Staff:

Documents:

Citations:

NPSTORET Projects

University of Virginia non-NPS watersheds ***Sorted by ID***

Number of Projects for University of Virginia non-NPS watersheds:1

Projects filtered for:
Organization = PEFO: Petrified Forest National Park
SHEN: Shenandoah National Park
UVAVTSSS: University of Virginia non-NPS watersheds
Project = SOURCH2O: Shenandoah Source Waters
SWAS: Shenandoah Watershed Study
VTSSS: Virginia Trout Stream Sensitivity Study
VTSSS: Virginia Trout Stream Sensitivity Study

NPSTORET Analytical Procedures

Petrified Forest National Park *Sorted by ID*

ID: ALUMINUM_TCON **Name:** Colorimetric procedure for aluminum using the Technicon Autoanalyzer II
Org/Nat: ORG **Specific Equipment:**
Description: Colorimetric detection with open-system samples by pyrocatechol violet technique. Fractionation with ion-exchange resin.
Source: Shenandoah National Park
Citation:
Characteristics:

ID: AMMONIUM_TCON **Name:** Colorimetric procedure for ammonium using the Technicon Autoanalyzer II
Org/Nat: ORG **Specific Equipment:**
Description: Colorimetric detection by Indophenol blue technique.
Source: Shenandoah National Park
Citation:
Characteristics: Nitrogen, ammonium (NH4) as NH4: NH4_TC_Grab500

ID: ANC_2PT_MANUAL **Name:** Manual titration with pH meter and electrode
Org/Nat: ORG **Specific Equipment:** pH meter
Description: Two-point Gran titration with 100 ml sample volumes and 0.005 N HCl titrant. Titration endpoints were approx. 4.5 and 4.2. Within-aliquot stability (<= 0.01 units/min.) was obtained for endpoint determinations.
Source: Petrified Forest National Park
Citation:
Characteristics: Acid Neutralizing Capacity (ANC): ANC_Manual_Grab

ID: ANIONS_IC **Name:** Ion chromotography with the Dionex Model 14 IC for SO4, Cl, NO3
Org/Nat: ORG **Specific Equipment:** Ion Chromatograph
Description: Dionex Model 14 Ion Chromatograph; HPIC AS14 Separator Column; HPIC AG14 Guard Column; AMMS Anion Micro-Membrane Suppressor. Simultaneous determination by ion chromatography. Injection volume: 200 µl. Eluent: 1.5 mL 4.8 mM Na2CO3/0.6mM NaHCO3/minute. Regenerant: 3-4 ml 0.035 N H2SO4/minute.
Source: Shenandoah National Park
Citation:
Characteristics: Chloride: Cl_IC_Grab
Nitrogen, Nitrate (NO3) as NO3: NO3_IC_Grab
Sulfur, sulfate (SO4) as SO4: SO4_IC_Grab

ID: CATIONS_AA **Name:** Atomic absorption analysis with the Thermo Jarrell Ash Model Smith-Hieftje 22 for Ca, Mg, Na, K
Org/Nat: ORG **Specific Equipment:** Atomic Absorption Spectrophotometer
Description: Thermo Jarrell Ash AA/AE Spectrophotometer Model Smith-Hieftje 22. Flame atomic absorption spectro-photometry. Li/La added to aliquot.
Source: Petrified Forest National Park
Citation:
Characteristics: Calcium: Ca_AA_Grab
Magnesium: Mg_AA_Grab
Potassium: K_AA_Grab
Sodium: Na_AA_Grab

ID: COND_VWR_MANUAL **Name:** Conductivity procedure using a VWR-brand NIST traceable digital conductivity meter w/ ATC

Org/Nat: ORG **Specific Equipment:** Conductivity Meter

Description: VWR-brand (manufactured by Control Company) NIST Traceable digital conductivity meter with automatic temperature compensation to 25 degrees C. Digital meter and conductivity probe.
Readings obtained at ambient lab temperature (about 23 deg. C).

Source: Petrified Forest National Park

Citation:

Characteristics:

ID: COND_YSI_MANUAL **Name:** Conductivity procedure using a YSI-brand conductivity meter

Org/Nat: ORG **Specific Equipment:** Conductivity Meter

Description: Last session for this procedure was 6/18/03.

Source: Shenandoah National Park

Citation:

Characteristics: Specific conductance: Cond_YSI_Manual_Grab

ID: IONRATIO_IC_IC **Name:** sum of anions by IC / sum of cations by IC

Org/Nat: ORG **Specific Equipment:**

Description: see IONS_IC
IONRATIO=(Cl+NO3+SO4)/(Ca+Mg+Na+K+NH4)
for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)

Source: Petrified Forest National Park

Citation:

Characteristics:

ID: IONS_IC **Name:** Ion chromotography with Dionex ICS-3000/Chromeleon for Mg, Na, Ca, K, SO4, NO3, Cl, and NH4

Org/Nat: ORG **Specific Equipment:** Ion Chromatograph

Description:

Source: Petrified Forest National Park

Citation:

Characteristics:

ID: LAB_PH_MANUAL **Name:** pH meter with electrode for manual lab pH measurement

Org/Nat: ORG **Specific Equipment:** pH meter

Description: Potentiometric measurement with open-system samples. Within-aliquot stability (<= 0.01 units/min.) and sequential-aliquot agreement (<= 0.03 units difference) obtained for all readings.

Source: Petrified Forest National Park

Citation:

Characteristics: pH: pH_Manual_Grab

ID: RATIO_2PT_IC1 **Name:** sum of anions by IC / sum of cations by AA

Org/Nat: ORG **Specific Equipment:**

Description: see ANIONS_IC, CATIONS_AA
IONRATIO=(Cl+NO3+SO4)/(Ca+Mg+Na+K)

for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)

Source: Petrified Forest National Park

Citation:

Characteristics: Anion / Cation Ratio: IONRATIO_2PT_IC1_AA_GRAB

ID: SAA_2PT_IC1 **Name:** sum of acid anions by IC

Org/Nat: ORG **Specific Equipment:**

Description: see ANIONS_IC
SAA=Cl+NO3+SO4+ANC
for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)

Source: Petrified Forest National Park

Citation:

Characteristics: Anions, Sum of: SAA_2PT_IC1_GRAB

ID: SAA_2PT_IC2 **Name:** sum of acid anions by IC

Org/Nat: ORG **Specific Equipment:**

Description: see IONS_IC
SAA=Cl+NO3+SO4+ANC
for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)

Source: Petrified Forest National Park

Citation:

Characteristics:

ID: SBC_AA **Name:** sum of base cations by AA

Org/Nat: ORG **Specific Equipment:**

Description: see CATIONS_AA
SBC=Ca+Mg+NA+K
for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)

Source: Petrified Forest National Park

Citation:

Characteristics: Cations, Sum of: SBC_AA_GRAB

ID: SBC_IC2 **Name:** sum of base cations by IC

Org/Nat: ORG **Specific Equipment:**

Description: see IONS_AA
SBC=Ca+Mg+NA+K+NH4
for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)

Source: Petrified Forest National Park

Citation:

Characteristics:

ID: SILICA_TCON **Name:** Technicon procedure for silica

Org/Nat: ORG **Specific Equipment:** Colorimeter

Petrified Forest National Park — *Sorted by ID*

Description: Colorimetric detection by molybdate blue technique with the Technicon Autoanalyzer II.

Source: Shenandoah National Park

Citation:

Characteristics: Silica: SiO2_TC_Grab

Number of Analytical Procedures for Petrified Forest National Park:16

Shenandoah National Park — *Sorted by ID*

ID: AL_ORG_TCON **Name:** Colorimetric procedure for organic monomeric aluminum using the Technicon Autoanalyzer II

Org/Nat: ORG **Specific Equipment:** AutoAnalyzer

Description: Colorimetric detection of organic monomeric aluminum with open-system samples by fractionation with cation exchange resin and detection by pyrocatechol violet technique.

Source: Shenandoah National Park

Citation:

Characteristics: Aluminum, Organic Monomeric (reactive aluminum): O_AL_TC_AutoStream
Aluminum, Organic Monomeric (reactive aluminum): O_AL_TC_Grab

ID: AL_TOT_TCON **Name:** Colorimetric procedure for total monomeric aluminum using the Technicon Autoanalyzer II

Org/Nat: ORG **Specific Equipment:** AutoAnalyzer

Description: Colorimetric detection of total monomeric aluminum with open-system samples by pyrocatechol violet technique.

Source: Shenandoah National Park

Citation:

Characteristics: Aluminum, Organic + Inorganic Monomeric (reactive aluminum): T_AL_TC_AutoStream
Aluminum, Organic + Inorganic Monomeric (reactive aluminum): T_AL_TC_Grab

ID: AMMONIUM_TCON **Name:** Colorimetric procedure for ammonium using the Technicon Autoanalyzer II

Org/Nat: ORG **Specific Equipment:** AutoAnalyzer

Description: Colorimetric detection by Indophenol blue technique.

Source: Shenandoah National Park

Citation:

Characteristics: Nitrogen, ammonium (NH4) as NH4: NH4_Chang_LH
Nitrogen, ammonium (NH4) as NH4: NH4_TC_AutoStream
Nitrogen, ammonium (NH4) as NH4: NH4_TC_AutoPpt
Nitrogen, ammonium (NH4) as NH4: NH4_TC_Bulk
Nitrogen, ammonium (NH4) as NH4: NH4_TC_Grab250
Nitrogen, ammonium (NH4) as NH4: NH4_TC_Grab500
Nitrogen, ammonium (NH4) as NH4: NH4_TC_Wet

ID: ANC_2PT_MANUAL **Name:** 2-point manual titration with pH meter and electrode

Org/Nat: ORG **Specific Equipment:** pH meter

Description: Two-point Gran titration with 100 ml sample volumes and 0.005 N HCl titrant. Titration endpoints were approx. 4.5 and 4.2. Within-aliquot stability (<= 0.01 units/min.) was obtained for endpoint determinations.

Source: Shenandoah National Park

Citation:

Characteristics: Acid Neutralizing Capacity (ANC): ANC_Manual_Grab

Acid Neutralizing Capacity (ANC): ANC_Manual_AutoStream

ID: ANC_PH_AUTOTITR **Name:** ANC and pH with the Metrohm 809 titration system
Org/Nat: ORG **Specific Equipment:** Titration Apparatus
Description: pH measurement and ANC (Acid Neutralizing Capacity) Gran titration using Metrohm 809 titration system
Source: Shenandoah National Park
Citation:
Characteristics: Acid Neutralizing Capacity (ANC): ANC_Metrohm_Grab
Acid Neutralizing Capacity (ANC): ANC_Metrohm_AutoStream
pH: pH_Metrohm_Grab
pH: pH_Metrohm_AutoStream

ID: ANIONS_IC **Name:** Ion chromotography with the Dionex Model 14 IC for SO4, Cl, NO3
Org/Nat: ORG **Specific Equipment:** Ion Chromatograph
Description: Dionex Model 14 Ion Chromatograph; HPIC AS14 Separator Column; HPIC AG14 Guard Column; AMMS Anion Micro-Membrane Suppressor. Simultaneous determination by ion chromatography. Injection volume: 200 µl. Eluent: 1.5 mL 4.8 mM Na2CO3/0.6mM NaHCO3/minute. Regenerant: 3-4 ml 0.035 N H2SO4/minute.
Source: Shenandoah National Park
Citation:
Characteristics: Chloride: Cl_IC_Wet
Chloride: Cl_IC_Grab
Chloride: Cl_IC_Bulk
Chloride: Cl_IC_AutoStream
Chloride: Cl_IC_AutoPpt
Chloride: Cl_Chang_LH
Nitrogen, Nitrate (NO3) as NO3: NO3_Chang_LH
Nitrogen, Nitrate (NO3) as NO3: NO3_IC_AutoStream
Nitrogen, Nitrate (NO3) as NO3: NO3_IC_Bulk
Nitrogen, Nitrate (NO3) as NO3: NO3_IC_AutoPpt
Nitrogen, Nitrate (NO3) as NO3: NO3_IC_Grab
Nitrogen, Nitrate (NO3) as NO3: NO3_IC_Wet
Sulfur, sulfate (SO4) as SO4: SO4_IC_Wet
Sulfur, sulfate (SO4) as SO4: SO4_IC_AutoPpt
Sulfur, sulfate (SO4) as SO4: SO4_IC_AutoStream
Sulfur, sulfate (SO4) as SO4: SO4_IC_Grab
Sulfur, sulfate (SO4) as SO4: SO4_Chang_LH
Sulfur, sulfate (SO4) as SO4: SO4_IC_Bulk

ID: CATIONS_AA **Name:** Atomic absorption analysis with the Thermo Jarrell Ash Model Smith-Hieftje 22 for Ca, Mg, Na, K
Org/Nat: ORG **Specific Equipment:** Atomic Absorption Spectrophotometer
Description: Thermo Jarrell Ash AA/AE Spectrophotometer Model Smith-Hieftje 22. Flame atomic absorption spectro-photometry. Li/La added to aliquot.
Source: Shenandoah National Park
Citation:
Characteristics: Calcium: Ca_AA_Bulk
Calcium: Ca_AA_Wet

Calcium: Ca_AA_AutoStream
Calcium: Ca_AA_AutoPpt
Calcium: Ca_Chang_LH
Calcium: Ca_AA_Grab
Magnesium: Mg_AA_Wet
Magnesium: Mg_Chang_LH
Magnesium: Mg_AA_AutoStream
Magnesium: Mg_AA_AutoPpt
Magnesium: Mg_AA_Bulk
Magnesium: Mg_AA_Grab
Potassium: K_AA_AutoStream
Potassium: K_AA_AutoPpt
Potassium: K_AA_Grab
Potassium: K_AA_Bulk
Potassium: K_Chang_LH
Potassium: K_AA_Wet
Sodium: Na_AA_Bulk
Sodium: Na_AA_Grab
Sodium: Na_AA_AutoPpt
Sodium: Na_AA_AutoStream
Sodium: Na_Chang_LH
Sodium: Na_AA_Wet

ID: CHLORIDE_TCON **Name:** Colorimetric procedure for chloride using the Technicon Autoanalyzer II
Org/Nat: ORG **Specific Equipment:** AutoAnalyzer
Description:
Source: Shenandoah National Park
Citation: The composition of precipitation in remote areas of the world
Characteristics: Chloride: Cl_TC_Grab

ID: COND_VWR_MANUAL **Name:** Conductivity procedure using a VWR-brand NIST traceable digital conductivity meter w/ ATC
Org/Nat: ORG **Specific Equipment:** Conductivity Meter
Description: VWR-brand (manufactured by Control Company) NIST Traceable digital conductivity meter with automatic temperature compensation to 25 degrees C. Digital meter and conductivity probe.
Readings obtained at ambient lab temperature (about 23 deg. C).
Source: Shenandoah National Park
Citation:
Characteristics: Specific conductance: Cond_VWR_Manual_AutoStream
Specific conductance: Cond_VWR_Manual_Autoppt
Specific conductance: Cond_VWR_Manual_Bulk
Specific conductance: Cond_VWR_Manual_Grab
Specific conductance: Cond_VWR_Manual_wet

ID: COND_YSI_MANUAL **Name:** Conductivity procedure using a YSI-brand conductivity meter
Org/Nat: ORG **Specific Equipment:** Conductivity Meter
Description: Conductivity measurement using YSI Model 31 conductivity bridge

Source: Shenandoah National Park

Citation:

Characteristics: Specific conductance: Cond_YSI_Manual_Grab
Specific conductance: Cond_YSI_Manual_AutoStream

ID: DOC_DOHR_DC-80 **Name:** Dissolved Organic Carbon by Dohrmann DC-80

Org/Nat: ORG **Specific Equipment:** Carbon Analyzer

Description: Dohrmann DC-80 TOC Analyzer. Ultra-violet promoted persulfate oxidation technique followed by infrared detection. External sparging is used to remove inorganic carbon.

Source: Shenandoah National Park

Citation:

Characteristics: Carbon, organic: DOC_DC80_UVA_Grab
Carbon, organic: DOC_DC80_UVA_AutoStream
Carbon, organic: DOC_DC80_UMD_AutoStream
Carbon, organic: DOC_DC80_UMD_Grab

ID: DOC_PHOEN_8000 **Name:** Dissolved organic carbon by Teledyne-Tekmar Phoenix 8000

Org/Nat: ORG **Specific Equipment:** Carbon Analyzer

Description: Teledyne-Tekmar Phoenix 8000 TOC Analyzer. Ultra-violet promoted persulfate oxidation technique followed by infrared detection. External sparging is used to remove inorganic carbon.

Source: Shenandoah National Park

Citation:

Characteristics: Carbon, organic: DOC_PHN_8K_PA_UVA_AutoStream
Carbon, organic: DOC_PHN_8K_PA_UVA_Grab
Carbon, organic: DOC_PHN_8K_UMD_AutoStream
Carbon, organic: DOC_PHN_8K_UMD_Grab
Carbon, organic: DOC_PHN_8K_UVA_Grab
Carbon, organic: DOC_PHN_8K_UVA_AutoStream

ID: FIELD_PH_MANUAL **Name:** pH meter with electrode for manual field pH measurement

Org/Nat: ORG **Specific Equipment:** pH meter

Description: Potentiometric measurement with open-system samples. Within-aliquot stability (<= 0.01 units/min.) and sequential-aliquot agreement (<= 0.03 units difference) obtained for all readings.

Source: Shenandoah National Park

Citation:

Characteristics: pH: pH_Manual_Field

ID: FLOWMATE2K **Name:** Flowmate 2000 velocity measurement

Org/Nat: ORG **Specific Equipment:**

Description: Marsh-McBirney Flowmate 2000 velocity flowmeter using electromagnetic velocity measurement set to 20 second averaging and units of feet per second.

Source: Shenandoah National Park

Citation:

Characteristics: Discharge velocity: discharge velocity

ID: IONS_IC **Name:** Ion chromatography with Dionex ICS-3000/Chromeleon for Mg, Na, Ca, K, SO4, NO3, Cl

and NH4

Org/Nat: ORG **Specific Equipment:** Ion Chromatograph

Description: Quantification of anions (Cl, NO3, SO4) and cations (Ca, K, Mg, Na, NH4) using Dionex ICS-3000 with Chromeleon software.

Source: Shenandoah National Park

Citation:

Characteristics: Calcium: Ca_Ions_AutoStream
Calcium: Ca_Ions_Grab
Chloride: Cl_Ions_AutoStream
Chloride: Cl_Ions_Grab
Magnesium: Mg_Ions_Grab
Magnesium: Mg_Ions_AutoStream
Nitrogen, ammonium (NH4) as NH4: NH4_Ions_Grab
Nitrogen, ammonium (NH4) as NH4: NH4_Ions_AutoStream
Nitrogen, Nitrate (NO3) as NO3: NO3_Ions_Grab
Nitrogen, Nitrate (NO3) as NO3: NO3_Ions_AutoStream
Potassium: K_Ions_AutoStream
Potassium: K_Ions_Grab
Sodium: Na_Ions_AutoStream
Sodium: Na_Ions_Grab
Sulfur, sulfate (SO4) as SO4: SO4_Ions_AutoStream
Sulfur, sulfate (SO4) as SO4: SO4_Ions_Grab

ID: LAB_PH_MANUAL **Name:** pH meter with electrode for manual lab pH measurement

Org/Nat: ORG **Specific Equipment:** pH meter

Description: Potentiometric measurement with open-system samples. Within-aliquot stability (<= 0.01 units/min.) and sequential-aliquot agreement (<= 0.03 units difference) obtained for all readings.

Source: Shenandoah National Park

Citation:

Characteristics: pH: pH_Manual_Wet
pH: pH_Manual_Grab
pH: pH_Manual_Bulk
pH: pH_Manual_AutoPpt
pH: pH_Manual_AutoStream

ID: METALS_EPA **Name:** Metals by EPA method

Org/Nat: ORG **Specific Equipment:**

Description:

Source: Shenandoah National Park

Citation:

Characteristics:

ID: NITRATE_TCON **Name:** Colorimetric procedure for nitrate using the Technicon Autoanalyzer II

Org/Nat: ORG **Specific Equipment:** AutoAnalyzer

Description:

Source: Shenandoah National Park

Citation: The composition of precipitation in remote areas of the world

Characteristics: Nitrogen, Nitrate (NO3) as NO3: NO3_TC_Grab

ID: NONFILTRESIDUE **Name:** Non-filterable residue by filtration and drying
Org/Nat: ORG **Specific Equipment:** Drying Oven
Description: Filtration through glass fiber filter; drying in oven at approx. 105 degrees C.
Source: Shenandoah National Park
Citation:
Characteristics: Solids, Total Suspended (TSS): Non-filterable Residue

ID: RATIO_2PT_IC1 **Name:** sum of anions by IC1 and manual 2-point titration / sum of cations by AA
Org/Nat: ORG **Specific Equipment:**
Description: see ANIONS_IC, CATIONS_AA
IONRATIO=(Cl+NO3+SO4+ANC)/(Ca+Mg+Na+K)
for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)
Source: Shenandoah National Park
Citation:
Characteristics: Anion / Cation Ratio: IONRATIO_2PT_IC1_AA_AUTO
Anion / Cation Ratio: IONRATIO_2PT_IC1_AA_GRAB

ID: RATIO_2PT_IC2 **Name:** sum of anions by IC2 and manual 2-point titration / sum of cations by IC
Org/Nat: ORG **Specific Equipment:**
Description: see IONS_IC
IONRATIO=(Cl+NO3+SO4+ANC)/(Ca+Mg+Na+K+NH4)
for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)
Source: Shenandoah National Park
Citation:
Characteristics: Anion / Cation Ratio: IONRATIO_2PT_IC2_AUTO
Anion / Cation Ratio: IONRATIO_2PT_IC2_GRAB

ID: RATIO_2PT_TC_AA **Name:** sum of anions by TC and manual 2-point titration / sum of cations by AA
Org/Nat: ORG **Specific Equipment:**
Description: see ANIONS_TC, CATIONS_AA
IONRATIO=(Cl+NO3+SO4+ANC)/(Ca+Mg+Na+K)
for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)
Source: Shenandoah National Park
Citation:
Characteristics: Anion / Cation Ratio: IONRATIO_2PT_TC_AA_GRAB

ID: RATIO_MET_IC1 **Name:** IONRATIO by IC1, AA, and Metrohm titration
Org/Nat: ORG **Specific Equipment:**
Description: see ANIONS_IC, CATIONS_AA
IONRATIO=(Cl+NO3+SO4+ANC)/(Ca+Mg+Na+K)
for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)

Source: Shenandoah National Park
Citation:
Characteristics: Anion / Cation Ratio: IONRATIO_MET_IC1_AA_AUTO
Anion / Cation Ratio: IONRATIO_MET_IC1_AA_GRAB

ID: RATIO_MET_IC2 **Name:** IONRATIO by IC2 and Metrohm titration
Org/Nat: ORG **Specific Equipment:**
Description: see IONS_IC
IONRATIO=(Cl+NO3+SO4+ANC)/(Ca+Mg+Na+K+NH4)
for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)
Source: Shenandoah National Park
Citation:
Characteristics: Anion / Cation Ratio: IONRATIO_MET_IC2_GRAB
Anion / Cation Ratio: IONRATIO_MET_IC2_AUTO

ID: SAA_2PT_IC1 **Name:** sum of acid anions by IC1 and 2-point manual titration
Org/Nat: ORG **Specific Equipment:**
Description: see ANIONS_IC
SAA=Cl+NO3+SO4+ANC
for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)
Source: Shenandoah National Park
Citation:
Characteristics: Anions, Sum of: SAA_2PT_IC1_AUTO
Anions, Sum of: SAA_2PT_IC1_GRAB

ID: SAA_2PT_IC2 **Name:** sum of acid anions by IC2 and manual 2-point titration
Org/Nat: ORG **Specific Equipment:**
Description: see IONS_IC
SAA=Cl+NO3+SO4+ANC
for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)
Source: Shenandoah National Park
Citation:
Characteristics: Anions, Sum of: SAA_2PT_IC2_AUTO
Anions, Sum of: SAA_2PT_IC2_GRAB

ID: SAA_2PT_TC **Name:** sum of acid anions by Technicon and 2-point manual titration
Org/Nat: ORG **Specific Equipment:**
Description: see TCON_SULFATE, TCON_NITRATE, TCON_CHLORIDE
SAA=Cl+NO3+SO4+ANC
for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)
Source: Shenandoah National Park
Citation:
Characteristics: Anions, Sum of: SAA_2PT_TC_GRAB

ID: SAA_MET_IC1 **Name:** SAA by IC1 and Metrohm titration
Org/Nat: ORG **Specific Equipment:**
Description: see ANIONS_IC
SAA=Cl+NO3+SO4+ANC
for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)
Source: University of Virginia non-NPS watersheds
Citation:
Characteristics: Anions, Sum of: SAA_MET_IC1_AUTO
Anions, Sum of: SAA_MET_IC1_GRAB

ID: SAA_MET_IC2 **Name:** SAA by IC2 and Metrohm titration
Org/Nat: ORG **Specific Equipment:**
Description: see IONS_IC
SAA=Cl+NO3+SO4+ANC
for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)
Source: University of Virginia non-NPS watersheds
Citation:
Characteristics: Anions, Sum of: SAA_MET_IC2_AUTO
Anions, Sum of: SAA_MET_IC2_GRAB

ID: SBC_AA **Name:** sum of base cations by AA
Org/Nat: ORG **Specific Equipment:**
Description: see CATIONS_AA
SBC=Ca+Mg+Na+K
for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)
Source: Shenandoah National Park
Citation:
Characteristics: Cations, Sum of: SBC_AA_LYS
Cations, Sum of: SBC_AA_AUTO
Cations, Sum of: SBC_AA_GRAB

ID: SBC_IC2 **Name:** sum of base cations by IC2
Org/Nat: ORG **Specific Equipment:**
Description: see IONS_AA
SBC=Ca+Mg+Na+K+NH4
for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)
Source: Shenandoah National Park
Citation:
Characteristics: Cations, Sum of: SBC_IC2_AUTO
Cations, Sum of: SBC_IC2_GRAB

ID: SILICA_TCON **Name:** Colorimetric procedure for silica using the Technicon Autoanalyzer II
Org/Nat: ORG **Specific Equipment:** AutoAnalyzer
Description: Colorimetric detection by molybdate blue technique with the Technicon Autoanalyzer II.

Source: Shenandoah National Park
Citation:
Characteristics: Silica: SiO2_TC_AutoStream
Silica: SiO2_TC_AutoPpt
Silica: SiO2_TC_Bulk
Silica: SiO2_TC_Grab
Silica: SiO2_TC_Wet

ID: STREAMTEMP **Name:** Measure stream temperature
Org/Nat: ORG **Specific Equipment:**
Description: Place thermometer underwater and allow to equilibrate. Read temperature to nearest 0.5 degrees C while thermometer is below the surface of the water.
Source: Shenandoah National Park
Citation:
Characteristics: Temperature, water: Temp_Water_C

ID: SULFATE_TCON **Name:** Colorimetric procedure for chloride using the Technicon Autoanalyzer II
Org/Nat: ORG **Specific Equipment:** AutoAnalyzer
Description:
Source: Shenandoah National Park
Citation: The composition of precipitation in remote areas of the world
Characteristics: Sulfur, sulfate (SO4) as SO4: SO4_TC_Grab

ID: VOLATILERESIDUE **Name:** Volatile residue by filtration and volatilization
Org/Nat: ORG **Specific Equipment:** Drying Oven
Description: Thermolyne 48000 Furnace. Filtration through glass fiber filter; volatilization in furnace at 500 degrees C.
Source: Shenandoah National Park
Citation:
Characteristics: Solids, Volatile: Volatile Residue

Number of Analytical Procedures for Shenandoah National Park:35

University of Virginia non-NPS watersheds *Sorted by ID*

ID: AL_ORG_TCON **Name:** Colorimetric procedure for organic monomeric aluminum using the Technicon Autoanalyzer II
Org/Nat: ORG **Specific Equipment:** AutoAnalyzer
Description: Colorimetric detection of organic monomeric aluminum with open-system samples by fractionation with cation exchange resin and detection by pyrocatechol violet technique.
Source: University of Virginia non-NPS watersheds
Citation:
Characteristics: Aluminum, Organic Monomeric (reactive aluminum): O_AL_TC_AutoStream
Aluminum, Organic Monomeric (reactive aluminum): O_AL_TC_Grab_F_RE
Aluminum, Organic Monomeric (reactive aluminum): O_AL_TC_Grab

ID: AL_TOT_TCON **Name:** Colorimetric procedure for total monomeric aluminum using the Technicon Autoanalyzer II
Org/Nat: ORG **Specific Equipment:** AutoAnalyzer

Description: Colorimetric detection of total monomeric aluminum with open-system samples by pyrocatechol violet technique.
Source: University of Virginia non-NPS watersheds
Citation:

Characteristics: Aluminum, Organic + Inorganic Monomeric (reactive aluminum): T_AL_TC_AutoStream
Aluminum, Organic + Inorganic Monomeric (reactive aluminum): T_AL_TC_Grab_F_RE
Aluminum, Organic + Inorganic Monomeric (reactive aluminum): T_AL_TC_Grab

ID: AMMONIUM_TCON **Name:** Colorimetric procedure for ammonium using the Technicon Autoanalyzer II
Org/Nat: ORG **Specific Equipment:** AutoAnalyzer
Description: Colorimetric detection by Indophenol blue technique.
Source: University of Virginia non-NPS watersheds
Citation:

Characteristics: Nitrogen, ammonium (NH4) as NH4: NH4_Chang_LH
Nitrogen, ammonium (NH4) as NH4: NH4_TC_AutoStream
Nitrogen, ammonium (NH4) as NH4: NH4_TC_AutoPpt
Nitrogen, ammonium (NH4) as NH4: NH4_TC_Bulk
Nitrogen, ammonium (NH4) as NH4: NH4_TC_Wet
Nitrogen, ammonium (NH4) as NH4: NH4_TC_Grab_F_A_RE
Nitrogen, ammonium (NH4) as NH4: NH4_TC_Grab250
Nitrogen, ammonium (NH4) as NH4: NH4_TC_Grab500

ID: ANC_2PT_MANUAL **Name:** 2-point manual titration with pH meter and electrode
Org/Nat: ORG **Specific Equipment:** pH meter
Description: Two-point Gran titration with 100 ml sample volumes and 0.005 N HCl titrant. Titration endpoints were approx. 4.5 and 4.2. Within-aliquot stability (<= 0.01 units/min.) was obtained for endpoint determinations.
Source: University of Virginia non-NPS watersheds
Citation:

Characteristics: Acid Neutralizing Capacity (ANC): ANC_Manual_AutoStream
Acid Neutralizing Capacity (ANC): ANC_Manual_Grab

ID: ANC_5PT_MANUAL **Name:** 5-point manual titration with pH meter and electrode
Org/Nat: ORG **Specific Equipment:** pH meter
Description: Five-point Gran titration with 100 ml sample volumes and 0.005 N HCl titrant. Titration endpoints were approx. 4.5 and 4.2. Within-aliquot stability (<= 0.01 units/min.) was obtained for endpoint determinations.
Source: University of Virginia non-NPS watersheds
Citation:

Characteristics: Acid Neutralizing Capacity (ANC): ANC_5PT_Manual_Grab_RE

ID: ANC_PH_AUTOTITR **Name:** ANC and pH with the Metrohm 809 titration system
Org/Nat: ORG **Specific Equipment:** Titration Apparatus
Description: pH measurement and ANC (Acid neutralizing capacity) Gran titration using Metrohm 809 titration system
Source: University of Virginia non-NPS watersheds
Citation:

Characteristics: Acid Neutralizing Capacity (ANC): ANC_Metrohm_AutoStream
Acid Neutralizing Capacity (ANC): ANC_Metrohm_Grab
pH: pH_Metrohm_AutoStream

pH: pH_Metrohm_Grab

ID: ANIONS_IC **Name:** Ion chromotography with the Dionex Model 14 IC for SO4, Cl, NO3

Org/Nat: ORG **Specific Equipment:** Ion Chromatograph

Description: Dionex Model 14 Ion Chromatograph; HPIC AS14 Separator Column; HPIC AG14 Guard Column; AMMS Anion Micro-Membrane Suppressor. Simultaneous determination by ion chromatography. Injection volume: 200 µl. Eluent: 1.5 mL 4.8 mM Na2CO3/0.6mM NaHCO3/minute. Regenerant: 3-4 ml 0.035 N H2SO4/minute.

Source: Shenandoah National Park

Citation:

Characteristics: Chloride: Cl_Chang_LH
Chloride: Cl_IC_Wet
Chloride: Cl_IC_Bulk
Chloride: Cl_IC_AutoStream
Chloride: Cl_IC_AutoPpt
Chloride: Cl_IC_Grab
Chloride: CL_IC_Grab_F_RE
Nitrogen, Nitrate (NO3) as NO3: NO3_IC_Wet
Nitrogen, Nitrate (NO3) as NO3: NO3_Chang_LH
Nitrogen, Nitrate (NO3) as NO3: NO3_IC_Grab_F_RE
Nitrogen, Nitrate (NO3) as NO3: NO3_IC_Grab
Nitrogen, Nitrate (NO3) as NO3: NO3_IC_Bulk
Nitrogen, Nitrate (NO3) as NO3: NO3_IC_AutoStream
Nitrogen, Nitrate (NO3) as NO3: NO3_IC_AutoPpt
Sulfur, sulfate (SO4) as SO4: SO4_IC_Grab
Sulfur, sulfate (SO4) as SO4: SO4_IC_Grab_F_RE
Sulfur, sulfate (SO4) as SO4: SO4_IC_AutoStream
Sulfur, sulfate (SO4) as SO4: SO4_Chang_LH
Sulfur, sulfate (SO4) as SO4: SO4_IC_Bulk
Sulfur, sulfate (SO4) as SO4: SO4_IC_Wet
Sulfur, sulfate (SO4) as SO4: SO4_IC_AutoPpt

ID: CATIONS_AA **Name:** Atomic absorption analysis with the Thermo Jarrell Ash Model Smith-Hieftje 22 for Ca, Mg, Na, K

Org/Nat: ORG **Specific Equipment:** Atomic Absorption Spectrophotometer

Description: Thermo Jarrell Ash AA/AE Spectrophotometer Model Smith-Hieftje 22. Flame atomic absorption spectro-photometry. Li/La added to aliquot.

Source: University of Virginia non-NPS watersheds

Citation:

Characteristics: Calcium: Ca_AA_Grab_F_A
Calcium: Ca_Chang_LH
Calcium: Ca_AA_Wet
Calcium: Ca_AA_Bulk
Calcium: Ca_AA_AutoPpt
Calcium: Ca_AA_AutoStream
Calcium: Ca_AA_Grab
Magnesium: Mg_AA_AutoPpt
Magnesium: Mg_AA_Grab

Magnesium: Mg_AA_Grab_F_A
Magnesium: Mg_AA_Bulk
Magnesium: Mg_AA_AutoStream
Magnesium: Mg_Chang_LH
Magnesium: Mg_AA_Wet
Potassium: K_AA_AutoPpt
Potassium: K_AA_Grab
Potassium: K_AA_AutoStream
Potassium: K_AA_Grab_F_A
Potassium: K_AA_Bulk
Potassium: K_AA_Wet
Potassium: K_Chang_LH
Sodium: Na_AA_Wet
Sodium: Na_AA_AutoStream
Sodium: Na_AA_AutoPpt
Sodium: Na_AA_Bulk
Sodium: Na_AA_Grab
Sodium: Na_Chang_LH
Sodium: Na_AA_Grab_F_A

ID: CHLORIDE_TCON **Name:** Colorimetric procedure for chloride using the Technicon Autoanalyzer II
Org/Nat: ORG **Specific Equipment:** AutoAnalyzer
Description:
Source: University of Virginia non-NPS watersheds
Citation: The composition of precipitation in remote areas of the world
Characteristics: Chloride: Cl_TC_Grab

ID: COND_VWR_MANUAL **Name:** Conductivity procedure using a VWR-brand NIST traceable digital conductivity meter w/ ATC
Org/Nat: ORG **Specific Equipment:** Conductivity Meter
Description: VWR-brand (manufactured by Control Company) NIST Traceable digital conductivity meter with automatic temperature compensation to 25 degrees C. Digital meter and conductivity probe.
Readings obtained at ambient lab temperature (about 23 deg. C).
Source: University of Virginia non-NPS watersheds
Citation:
Characteristics: Specific conductance: Cond_VWR_Manual_AutoStream
Specific conductance: Cond_VWR_Manual_Autoppt
Specific conductance: Cond_VWR_Manual_Bulk
Specific conductance: Cond_VWR_Manual_wet
Specific conductance: Cond_VWR_Manual_Grab

ID: COND_YSI_MANUAL **Name:** Conductivity procedure using a YSI-brand conductivity meter
Org/Nat: ORG **Specific Equipment:** Conductivity Meter
Description: Conductivity measurement using YSI Model 31 conductivity bridge
Source: University of Virginia non-NPS watersheds
Citation:
Characteristics: Specific conductance: Cond_YSI_Manual_AutoStream

Specific conductance: Cond_YSI_Manual_Grab_RE
Specific conductance: Cond_YSI_Manual_Grab

ID: DOC_DOHR_DC-80 **Name:** Dissolved Organic Carbon by Dohrmann DC-80
Org/Nat: ORG **Specific Equipment:** Carbon Analyzer
Description: Dohrmann DC-80 TOC Analyzer. Ultra-violet promoted persulfate oxidation technique followed by infrared detection. External sparging is used to remove inorganic carbon.
Source: University of Virginia non-NPS watersheds
Citation:
Characteristics: Carbon, organic: DOC_DC80_UVA_Grab
Carbon, organic: DOC_DC80_UVA_AutoStream
Carbon, organic: DOC_DC80_UMD_AutoStream
Carbon, organic: DOC_DC80_UMD_Grab
Carbon, organic: DOC_DC80_UVA_Grab_F_A_RE

ID: DOC_PHOEN_8000 **Name:** Dissolved Organic Carbon by Teledyne-Tekmar Phoenix 8000
Org/Nat: ORG **Specific Equipment:** Carbon Analyzer
Description: Teledyne-Tekmar Phoenix 8000 TOC Analyzer. Ultra-violet promoted persulfate oxidation technique followed by infrared detection. External sparging is used to remove inorganic carbon.
Source: University of Virginia non-NPS watersheds
Citation:
Characteristics: Carbon, organic: DOC_PHN_8K_UMD_AutoStream
Carbon, organic: DOC_PHN_8K_UMD_Grab
Carbon, organic: DOC_PHN_8K_UVA_AutoStream
Carbon, organic: DOC_PHN_8K_UVA_Grab

ID: FIELD_PH_MANUAL **Name:** pH meter with electrode for manual field pH measurement
Org/Nat: ORG **Specific Equipment:**
Description: Potentiometric measurement with open-system samples. Within-aliquot stability (<=0.01 units/min.) and sequential-aliquot agreement (<=0.03 units difference) obtained for all readings.
Source: University of Virginia non-NPS watersheds
Citation:
Characteristics: pH: pH_Manual_Field

ID: IONS_IC **Name:** Ion chromatography with Dionex ICS-3000/Chromeleon for Mg, Na, Ca, K, SO4, NO3, Cl, and NH4
Org/Nat: ORG **Specific Equipment:** Ion Chromatograph
Description: Quantification of anions (Cl, NO3, SO4) and cations (Ca, K, Mg, Na, NH4) using Dionex ICS-3000 with Chromeleon software.
Source: University of Virginia non-NPS watersheds
Citation:
Characteristics: Calcium: Ca_Ions_AutoStream
Calcium: Ca_Ions_Grab
Chloride: Cl_Ions_Grab
Chloride: Cl_Ions_AutoStream
Magnesium: Mg_Ions_Grab
Magnesium: Mg_Ions_AutoStream

Nitrogen, ammonium (NH4) as NH4: NH4_Ions_AutoStream
Nitrogen, ammonium (NH4) as NH4: NH4_Ions_Grab
Nitrogen, Nitrate (NO3) as NO3: NO3_Ions_AutoStream
Nitrogen, Nitrate (NO3) as NO3: NO3_Ions_Grab
Potassium: K_Ions_AutoStream
Potassium: K_Ions_Grab
Sodium: Na_Ions_AutoStream
Sodium: Na_Ions_Grab
Sulfur, sulfate (SO4) as SO4: SO4_Ions_AutoStream
Sulfur, sulfate (SO4) as SO4: SO4_Ions_Grab

ID: LAB_PH_MANUAL **Name:** pH meter with electrode for manual lab pH measurement
Org/Nat: ORG **Specific Equipment:** pH meter
Description: Potentiometric measurement with open-system samples. Within-aliquot stability (<= 0.01 units/min.) and sequential-aliquot agreement (<= 0.03 units difference) obtained for all readings.
Source: University of Virginia non-NPS watersheds
Citation:
Characteristics: pH: pH_Manual_Wet
pH: pH_Manual_Bulk
pH: pH_Manual_AutoPpt
pH: pH_Manual_AutoStream
pH: pH_Manual_Grab_RE
pH: pH_Manual_Grab

ID: NITRATE_TCON **Name:** Colorimetric procedure for nitrate using the Technicon Autoanalyzer II
Org/Nat: ORG **Specific Equipment:** AutoAnalyzer
Description:
Source: University of Virginia non-NPS watersheds
Citation: The composition of precipitation in remote areas of the world
Characteristics: Nitrogen, Nitrate (NO3) as NO3: NO3_TC_Grab

ID: NONFILTRESIDUE **Name:** Non-filterable residue by filtration and drying
Org/Nat: ORG **Specific Equipment:** Drying Oven
Description: Filtration through glass fiber filter; drying in oven at approx. 105 degrees C.
Source: Shenandoah National Park
Citation:
Characteristics: Solids, Total Suspended (TSS): Non-filterable Residue

ID: RATIO_2PT_IC1 **Name:** sum of anions by IC1 and manual 2-point titration / sum of cations by AA
Org/Nat: ORG **Specific Equipment:**
Description: see ANIONS_IC, CATIONS_AA
IONRATIO=(Cl+NO3+SO4+ANC)/(Ca+Mg+Na+K)
for individual ion values<MDL substitute 0.5*MDL
for individual ion values<LQL substitute 0.5*(MDL+LQL)
Source: University of Virginia non-NPS watersheds
Citation:
Characteristics: Anion / Cation Ratio: IONRATIO_2PT_IC1_AA_AUTO

Anion / Cation Ratio: IONRATIO_2PT_IC1_AA_GRAB

ID: RATIO_2PT_IC2 **Name:** sum of anions by IC2 and manual 2-point titration / sum of cations by IC
Org/Nat: ORG **Specific Equipment:**
Description: see IONS_IC
IONRATIO=(Cl+NO3+SO4+ANC)/(Ca+Mg+Na+K+NH4)
for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)
Source: University of Virginia non-NPS watersheds
Citation:
Characteristics: Anion / Cation Ratio: IONRATIO_2PT_IC2_AUTO
Anion / Cation Ratio: IONRATIO_2PT_IC2_GRAB

ID: RATIO_2PT_TC_AA **Name:** sum of anions by TC and 2-point manual titration / sum of cations by AA
Org/Nat: ORG **Specific Equipment:**
Description: see ANIONS_TC, CATIONS_AA
IONRATIO=(Cl+NO3+SO4+ANC)/(Ca+Mg+Na+K)
for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)
Source: University of Virginia non-NPS watersheds
Citation:
Characteristics: Anion / Cation Ratio: IONRATIO_2PT_TC_AA_GRAB

ID: RATIO_MET_IC1 **Name:** IONRATIO by IC1, AA, and Metrohm titration
Org/Nat: ORG **Specific Equipment:**
Description: see ANIONS_IC, CATIONS_AA
IONRATIO=(Cl+NO3+SO4+ANC)/(Ca+Mg+Na+K)
for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)
Source: University of Virginia non-NPS watersheds
Citation:
Characteristics: Anion / Cation Ratio: IONRATIO_MET_IC1_AA_GRAB

ID: RATIO_MET_IC2 **Name:** IONRATIO by IC2 and Metrohm titration
Org/Nat: ORG **Specific Equipment:**
Description: see IONS_IC
IONRATIO=(Cl+NO3+SO4+ANC)/(Ca+Mg+Na+K+NH4)
for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)
Source: University of Virginia non-NPS watersheds
Citation:
Characteristics: Anion / Cation Ratio: IONRATIO_MET_IC2_GRAB

ID: SAA_2PT_IC1 **Name:** sum of acid anions by IC1 and 2-point manual titration
Org/Nat: ORG **Specific Equipment:**
Description: see ANIONS_IC
SAA=Cl+NO3+SO4+ANC
for <MDL substitute 0.5*MDL

for <LQL substitute 0.5*(MDL+LQL)
Source: University of Virginia non-NPS watersheds
Citation:
Characteristics: Anions, Sum of: SAA_2PT_IC1_AUTO
Anions, Sum of: SAA_2PT_IC1_GRAB

ID: SAA_2PT_IC2 **Name:** sum of acid anions by IC2 and 2-point manual titration
Org/Nat: ORG **Specific Equipment:**
Description: see IONS_IC
SAA=Cl+NO3+SO4+ANC
for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)
Source: University of Virginia non-NPS watersheds
Citation:
Characteristics: Anions, Sum of: SAA_2PT_IC2_AUTO
Anions, Sum of: SAA_2PT_IC2_GRAB

ID: SAA_2PT_TC **Name:** sum of acid anions by TC and manual 2-point titration
Org/Nat: ORG **Specific Equipment:**
Description: see TCON_SULFATE, TCON_NITRATE, TCON_CHLORIDE
SAA=Cl+NO3+SO4+ANC
for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)
Source: University of Virginia non-NPS watersheds
Citation:
Characteristics: Anions, Sum of: SAA_2PT_TC_GRAB

ID: SAA_MET_IC1 **Name:** SAA by IC1 and Metrohm titration
Org/Nat: ORG **Specific Equipment:**
Description: see ANIONS_IC
SAA=Cl+NO3+SO4+ANC
for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)
Source: University of Virginia non-NPS watersheds
Citation:
Characteristics: Anions, Sum of: SAA_MET_IC1_GRAB

ID: SAA_MET_IC2 **Name:** SAA by IC2 and Metrohm titration
Org/Nat: ORG **Specific Equipment:**
Description: see IONS_IC
SAA=Cl+NO3+SO4+ANC
for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)
Source: University of Virginia non-NPS watersheds
Citation:
Characteristics: Anions, Sum of: SAA_MET_IC2_GRAB

ID: SBC_AA **Name:** sum of base cations by AA
Org/Nat: ORG **Specific Equipment:**
Description: see CATIONS_AA
SBC=Ca+Mg+NA+K
for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)
Source: University of Virginia non-NPS watersheds
Citation:
Characteristics: Cations, Sum of: SBC_AA_AUTO
Cations, Sum of: SBC_AA_GRAB

ID: SBC_IC2 **Name:** sum of base cations by IC2
Org/Nat: ORG **Specific Equipment:**
Description: see IONS_AA
SBC=Ca+Mg+NA+K+NH4
for <MDL substitute 0.5*MDL
for <LQL substitute 0.5*(MDL+LQL)
Source: University of Virginia non-NPS watersheds
Citation:
Characteristics: Cations, Sum of: SBC_IC2_AUTO
Cations, Sum of: SBC_IC2_GRAB

ID: SILICA_TCON **Name:** Technicon procedure for silica
Org/Nat: ORG **Specific Equipment:** AutoAnalyzer
Description: Colorimetric detection by molybdate blue technique with the Technicon Autoanalyzer II.
Source: University of Virginia non-NPS watersheds
Citation:
Characteristics: Silica: SiO2_TC_AutoStream
Silica: SiO2_TC_AutoPpt
Silica: SiO2_TC_Bulk
Silica: SiO2_TC_Wet
Silica: SiO2_TC_Grab_F_RE
Silica: SiO2_TC_Grab

ID: STREAMTEMP **Name:** Measure stream temperature
Org/Nat: ORG **Specific Equipment:**
Description: Place thermometer underwater and allow to equilibrate. Read temperature to the nearest 0.5 degrees C while thermometer is below the surface of the water.
Source: University of Virginia non-NPS watersheds
Citation:
Characteristics: Temperature, water: Temp_Water_C

ID: SULFATE_TCON **Name:** Colorimetric procedure for chloride using the Technicon Autoanalyzer II
Org/Nat: ORG **Specific Equipment:** AutoAnalyzer
Description:
Source: University of Virginia non-NPS watersheds
Citation: The composition of precipitation in remote areas of the world

Characteristics: Sulfur, sulfate (SO4) as SO4: SO4_TC_Grab

ID: VOLATILERESIDUE **Name:** Volatile residue by filtration and volatilization
Org/Nat: ORG **Specific Equipment:** Drying Oven
Description: Thermolyne 48000 Furnace. Filtration through glass fiber filter; volatilization in furnace at 500 degrees C.
Source: Shenandoah National Park
Citation:
Characteristics: Solids, Volatile: Volatile Residue

Number of Analytical Procedures for University of Virginia non-NPS watersheds:34

Analytical Procedures filtered for:
Organization = PEFO: Petrified Forest National Park
SHEN: Shenandoah National Park
UVAVTSSS: University of Virginia non-NPS watersheds

Appendix 4: Detection limits and lower quantitation limits used during the period 1/1/2007 to 12/31/2007

Local Characteristic Name	STORET Characteristic Name	First	Last	Detection Limit	Lower Quantification Limit	Units Abbreviation	Units description
Ca_Ions_AutoStream	Calcium	01/08/2007	06/29/2007	0.468	1.488	ueq/L	Micro-equivalents per Liter
Ca_Ions_Grab	Calcium	01/02/2007	12/27/2007	0.468	1.488	ueq/L	Micro-equivalents per Liter
Cl_Ions_AutoStream	Chloride	01/08/2007	06/29/2007	0.076	0.242	ueq/L	Micro-equivalents per Liter
Cl_Ions_Grab	Chloride	01/02/2007	12/27/2007	0.076	0.242	ueq/L	Micro-equivalents per Liter
Cond_VWR_Manual_AutoStream	Specific conductance	01/08/2007	06/29/2007	0.162	0.515	uS/cm	Micro-Siemens per Centimeter
Cond_VWR_Manual_Grab	Specific conductance	01/02/2007	12/27/2007	0.162	0.515	uS/cm	Micro-Siemens per Centimeter
K_Ions_AutoStream	Potassium	01/08/2007	06/29/2007	0.029	0.092	ueq/L	Micro-equivalents per Liter
K_Ions_Grab	Potassium	01/02/2007	12/27/2007	0.029	0.092	ueq/L	Micro-equivalents per Liter
Mg_Ions_AutoStream	Magnesium	01/08/2007	06/29/2007	0.218	0.694	ueq/L	Micro-equivalents per Liter
Mg_Ions_Grab	Magnesium	01/02/2007	12/27/2007	0.218	0.694	ueq/L	Micro-equivalents per Liter
NH4_Ions_AutoStream	Nitrogen, ammonium (NH4) as NH4	01/08/2007	06/29/2007	0.013	0.04	ueq/L	Micro-equivalents per Liter
NH4_Ions_Grab	Nitrogen, ammonium (NH4) as NH4	01/02/2007	12/27/2007	0.013	0.04	ueq/L	Micro-equivalents per Liter

Local Characteristic Name	STORET Characteristic Name	First	Last	Detection Limit	Lower Quantification Limit	Units Abbreviation	Units description
NO3_Ions_AutoStream	Nitrogen, Nitrate (NO3) as NO3	01/08/2007	06/29/2007	0.081	0.258	ueq/L	Micro-equivalents per Liter
NO3_Ions_Grab	Nitrogen, Nitrate (NO3) as NO3	01/02/2007	12/27/2007	0.081	0.258	ueq/L	Micro-equivalents per Liter
Na_Ions_AutoStream	Sodium	01/08/2007	06/29/2007	0.029	0.091	ueq/L	Micro-equivalents per Liter
Na_Ions_Grab	Sodium	01/02/2007	12/27/2007	0.029	0.091	ueq/L	Micro-equivalents per Liter
O_AL_TC_Grab	Aluminum, Organic Monomeric (reactive aluminum)	01/09/2007	10/30/2007	1.524	4.845	ug/l	micrograms per liter
SO4_Ions_AutoStream	Sulfur, sulfate (SO4) as SO4	01/08/2007	06/29/2007	0.31	0.986	ueq/L	Micro-equivalents per Liter
SO4_Ions_Grab	Sulfur, sulfate (SO4) as SO4	01/02/2007	12/27/2007	0.31	0.986	ueq/L	Micro-equivalents per Liter
SiO2_TC_AutoStream	Silica	01/08/2007	06/29/2007	1.051	3.342	umol/L	micromoles per liter
SiO2_TC_Grab	Silica	01/02/2007	12/27/2007	1.051	3.342	umol/L	micromoles per liter
T_AL_TC_AutoStream	Aluminum, Organic + Inorganic Monomeric (reactive aluminum)	03/16/2007	03/17/2007	1.524	4.845	ug/l	micrograms per liter
T_AL_TC_Grab	Aluminum, Organic + Inorganic Monomeric (reactive aluminum)	01/09/2007	12/26/2007	1.524	4.845	ug/l	micrograms per liter

NPSTORET Precision Analysis

Filtered Results

Project ID: GRAYSON **Station ID:** MC01 **Station Name:** MILL CREEK

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Manual_Grab (UVAVTSSS)	µeq/L	1/9/2007 2:45:00 PM		0	2	0	2	71.71	76.89	74.3	3.663	6.97%
Ca_Ions_Grab (UVAVTSSS)	µeq/L	1/9/2007 2:45:00 PM		0	2	0	2	109.3	109.5	109.4	0.0997	0.13%
Cl_Ions_Grab (UVAVTSSS)	µeq/L	1/9/2007 2:45:00 PM		0	2	0	2	38	38.05	38.02	0.0383	0.14%
Cond_VWR_Manual_Grab (UVAVTSSS)	µS/cm	1/9/2007 2:45:00 PM		0	2	0	2	26.7	26.9	26.8	0.1414	0.75%
K_Ions_Grab (UVAVTSSS)	µeq/L	1/9/2007 2:45:00 PM		0	2	0	2	11.46	11.46	11.46	0.0003	0.00%
Mg_Ions_Grab (UVAVTSSS)	µeq/L	1/9/2007 2:45:00 PM		0	2	0	2	48.74	48.8	48.77	0.0383	0.11%
Na_Ions_Grab (UVAVTSSS)	µeq/L	1/9/2007 2:45:00 PM		0	2	0	2	71.39	71.43	71.41	0.0282	0.06%
NO3_Ions_Grab (UVAVTSSS)	µeq/L	1/9/2007 2:45:00 PM		0	2	0	2	56.94	57.75	57.35	0.5754	1.42%
pH_Manual_Grab (UVAVTSSS)	None	1/9/2007 2:45:00 PM		0	2	0	2	6.68	6.73	6.705	0.0354	0.75%
SAA_2PT_IC2_GRAB (UVAVTSSS)	µeq/L	1/9/2007 2:45:00 PM		720	2	0	2	215.5	221.6	218.6	4.263	2.76%
SiO2_TC_Grab (UVAVTSSS)	µmol/L	1/9/2007 2:45:00 PM		0	2	0	2	133.7	134	133.9	0.2701	0.29%
SO4_Ions_Grab (UVAVTSSS)	µeq/L	1/9/2007 2:45:00 PM		0	2	0	2	48.87	48.89	48.88	0.0138	0.04%

Project ID: SOURCH2O **Station ID:** SP1812 **Station Name:** unnamed spring near Hightop

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	10/12/2007 1:11:00 PM			2	0	2	672.5	678.4	675.4	4.129	0.86%
Ca_Ions_Grab (SHEN)	µeq/L	10/12/2007 1:11:00 PM		0	2	0	2	345.9	345.9	345.9	0.0269	0.01%

NPSTORET Precision Analysis

Filtered Results

Project ID: SOURCH2O **Station ID:** SP1812 **Station Name:** unnamed spring near Hightop

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
Cl_Ions_Grab (SHEN)	µeq/L	10/12/2007 1:11:00 PM		0	2	0	2	47.43	47.59	47.51	0.1124	0.33%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	10/12/2007 1:11:00 PM		0	2	0	2	78.3	79	78.65	0.495	0.89%
IONRATIO_MET_IC2_GRAB (SHEN)	None	10/12/2007 1:11:00 PM		0	2	0	2	0.9512	0.9722	0.9617	0.0149	2.19%
K_Ions_Grab (SHEN)	µeq/L	10/12/2007 1:11:00 PM		0	2	0	2	52.86	53.82	53.34	0.6802	1.80%
Mg_Ions_Grab (SHEN)	µeq/L	10/12/2007 1:11:00 PM		0	2	0	2	140.3	140.8	140.6	0.3146	0.32%
Na_Ions_Grab (SHEN)	µeq/L	10/12/2007 1:11:00 PM		0	2	0	2	132.4	132.5	132.4	0.0453	0.05%
NH4_Ions_Grab (SHEN)	µeq/L	10/12/2007 1:11:00 PM		0	2	0	2	186.6	199.8	193.2	9.349	6.84%
NO3_Ions_Grab (SHEN)	µeq/L	10/12/2007 1:11:00 PM		0	2	0	2	4.783	5.978	5.381	0.8449	22.21%
pH_Metrohm_Grab (SHEN)	None	10/12/2007 1:11:00 PM			2	0	2	6.711	6.737	6.724	0.0184	0.39%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	10/12/2007 1:11:00 PM		0	2	0	2	828.8	835.7	832.3	4.864	0.83%
SBC_IC2_GRAB (SHEN)	µeq/L	10/12/2007 1:11:00 PM		0	2	0	2	859.6	871.3	865.5	8.336	1.36%
SiO2_TC_Grab (SHEN)	µmol/L	10/12/2007 1:11:00 PM		0	2	0	2	217.9	222.6	220.3	3.31	2.13%
SO4_Ions_Grab (SHEN)	µeq/L	10/12/2007 1:11:00 PM		0	2	0	2	103.8	104.1	103.9	0.2227	0.30%

Project ID: SOURCH2O **Station ID:** SP1858 **Station Name:** unnamed spring uphill of Byrd's Nest No. 3

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	10/4/2007 3:22:00 PM			2	0	2	63.09	66.02	64.56	2.072	4.54%
Ca_Ions_Grab (SHEN)	µeq/L	10/4/2007 3:22:00 PM		0	2	0	2	79.57	80.88	80.22	0.9257	1.63%
Cl_Ions_Grab (SHEN)	µeq/L	10/4/2007 3:22:00 PM		0	2	0	2	24.2	24.31	24.25	0.0808	0.47%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	10/4/2007 3:22:00 PM		0	2	0	2	20.8	21.1	20.95	0.2121	1.43%
IONRATIO_MET_IC2_GRAB (SHEN)	None	10/4/2007 3:22:00 PM		0	2	0	2	0.9625	1.003	0.9827	0.0285	4.10%
K_Ions_Grab (SHEN)	µeq/L	10/4/2007 3:22:00 PM		0	2	0	2	18.15	18.16	18.16	0.0003	0.00%

NPSTORET Precision Analysis

Filtered Results

Project ID: SOURCH2O **Station ID:** SP1858 **Station Name:** unnamed spring uphill of Byrd's Nest No. 3

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
Mg_Ions_Grab (SHEN)	µeq/L	10/4/2007 3:22:00 PM		0	2	0	2	43.1	43.33	43.21	0.1579	0.52%
Na_Ions_Grab (SHEN)	µeq/L	10/4/2007 3:22:00 PM		0	2	0	2	55.14	55.15	55.14	0.0016	0.00%
NH4_Ions_Grab (SHEN)	µeq/L	10/4/2007 3:22:00 PM		0	2	0	2	0.2109	0.6176	0.4143	0.2876	98.16%
NO3_Ions_Grab (SHEN)	µeq/L	10/4/2007 3:22:00 PM		0	2	0	2	99.38	102.3	100.8	2.073	2.91%
pH_Metrohm_Grab (SHEN)	None	10/4/2007 3:22:00 PM			2	0	2	5.841	5.894	5.868	0.0378	0.91%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	10/4/2007 3:22:00 PM		0	2	0	2	190.7	196.7	193.7	4.273	3.12%
SBC_IC2_GRAB (SHEN)	µeq/L	10/4/2007 3:22:00 PM		0	2	0	2	196.2	198.1	197.1	1.373	0.98%
SiO2_TC_Grab (SHEN)	µmol/L	10/4/2007 3:22:00 PM		0	2	0	2	123.9	124.1	124	0.1361	0.16%
SO4_Ions_Grab (SHEN)	µeq/L	10/4/2007 3:22:00 PM		0	2	0	2	4.026	4.092	4.059	0.0471	1.64%
T_AL_TC_Grab (SHEN)	µg/l	10/4/2007 3:22:00 PM		0	2	0	2	5.354	5.552	5.453	0.1404	3.64%

Project ID: SOURCH2O **Station ID:** SP1870 **Station Name:** Furnace Spring

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	10/2/2007 4:50:00 PM			2	0	2	278.1	284.4	281.3	4.472	2.25%
Ca_Ions_Grab (SHEN)	µeq/L	10/2/2007 4:50:00 PM		0	2	0	2	263	263.4	263.2	0.2597	0.14%
Cl_Ions_Grab (SHEN)	µeq/L	10/2/2007 4:50:00 PM		0	2	0	2	120.4	121.4	120.9	0.6887	0.81%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	10/2/2007 4:50:00 PM		0	2	0	2	46	46.3	46.15	0.2121	0.65%
IONRATIO_MET_IC2_GRAB (SHEN)	None	10/2/2007 4:50:00 PM		0	2	0	2	0.9618	0.9847	0.9733	0.0162	2.35%
K_Ions_Grab (SHEN)	µeq/L	10/2/2007 4:50:00 PM		0	2	0	2	5.861	5.896	5.878	0.0246	0.59%
Mg_Ions_Grab (SHEN)	µeq/L	10/2/2007 4:50:00 PM		0	2	0	2	146.3	146.4	146.4	0.0584	0.06%
Na_Ions_Grab (SHEN)	µeq/L	10/2/2007 4:50:00 PM		0	2	0	2	77.72	77.84	77.78	0.0888	0.16%
NH4_Ions_Grab (SHEN)	µeq/L	10/2/2007 4:50:00 PM		0	2	0	2	0.213	3.079	1.646	2.026	174.11%
NO3_Ions_Grab (SHEN)	µeq/L	10/2/2007 4:50:00 PM		0	2	0	2	25.98	27.19	26.58	0.8564	4.56%

NPSTORET Precision Analysis

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Project ID: SOURCH2O **Station ID:** SP1870 **Station Name:** Furnace Spring

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
pH_Metrohm_Grab (SHEN)	None	10/2/2007 4:50:00 PM			2	0	2	6.713	6.914	6.814	0.1417	2.94%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	10/2/2007 4:50:00 PM		0	2	0	2	477.3	486	481.7	6.169	1.81%
SBC_IC2_GRAB (SHEN)	µeq/L	10/2/2007 4:50:00 PM		0	2	0	2	493.6	496.3	494.9	1.889	0.54%
SiO2_TC_Grab (SHEN)	µmol/L	10/2/2007 4:50:00 PM		0	2	0	2	154.6	155	154.8	0.2739	0.25%
SO4_Ions_Grab (SHEN)	µeq/L	10/2/2007 4:50:00 PM		0	2	0	2	52.81	53.02	52.91	0.1518	0.41%

Project ID: SOURCH2O **Station ID:** SP1884 **Station Name:** Ivy Creek Spring

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	10/3/2007 10:58:00 AM			2	0	2	242.2	255.4	248.8	9.305	5.29%
Ca_Ions_Grab (SHEN)	µeq/L	10/3/2007 10:58:00 AM		0	2	0	2	226.3	226.6	226.4	0.2467	0.15%
Cl_Ions_Grab (SHEN)	µeq/L	10/3/2007 10:58:00 AM		0	2	0	2	21.02	21.12	21.07	0.0676	0.45%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	10/3/2007 10:58:00 AM		0	2	0	2	48.3	48.4	48.35	0.0707	0.21%
IONRATIO_MET_IC2_GRAB (SHEN)	None	10/3/2007 10:58:00 AM		0	2	0	2	0.9674	0.9868	0.9771	0.0137	1.98%
K_Ions_Grab (SHEN)	µeq/L	10/3/2007 10:58:00 AM		0	2	0	2	4.191	4.369	4.28	0.1255	4.15%
Mg_Ions_Grab (SHEN)	µeq/L	10/3/2007 10:58:00 AM		0	2	0	2	163.1	163.4	163.2	0.1768	0.15%
Na_Ions_Grab (SHEN)	µeq/L	10/3/2007 10:58:00 AM		0	2	0	2	115.2	115.5	115.4	0.211	0.26%
NH4_Ions_Grab (SHEN)	µeq/L	10/3/2007 10:58:00 AM		0	2	1	1	<0.013	0.4051	0.4051	***	***
NO3_Ions_Grab (SHEN)	µeq/L	10/3/2007 10:58:00 AM		0	2	0	2	156.9	159.7	158.3	1.96	1.75%
pH_Metrohm_Grab (SHEN)	None	10/3/2007 10:58:00 AM			2	0	2	6.384	6.403	6.393	0.0134	0.30%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	10/3/2007 10:58:00 AM		0	2	0	2	492.4	503.3	497.9	7.655	2.17%
SBC_IC2_GRAB (SHEN)	µeq/L	10/3/2007 10:58:00 AM		0	2	0	2	509.1	510	509.5	0.6882	0.19%
SiO2_TC_Grab (SHEN)	µmol/L	10/3/2007 10:58:00 AM		0	2	0	2	252.4	252.4	252.4	0	0.00%

NPSTORET Precision Analysis

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Project ID: SOURCH2O **Station ID:** SP1884 **Station Name:** Ivy Creek Spring

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
SO4_Ions_Grab (SHEN)	µeq/L	10/3/2007 10:58:00 AM		0	2	0	2	69.5	69.84	69.67	0.2423	0.49%

Project ID: SOURCH2O **Station ID:** SP3001 **Station Name:** spring near Dickey Ridge

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	10/5/2007 12:01:00 PM			2	0	2	596.2	596.3	596.3	0.0762	0.02%
Ca_Ions_Grab (SHEN)	µeq/L	10/5/2007 12:01:00 PM		0	2	0	2	319.6	319.9	319.7	0.2478	0.11%
Cl_Ions_Grab (SHEN)	µeq/L	10/5/2007 12:01:00 PM		0	2	0	2	37.48	37.62	37.55	0.1014	0.38%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	10/5/2007 12:01:00 PM		0	2	0	2	56.1	56.5	56.3	0.2828	0.71%
IONRATIO_MET_IC2_GRAB (SHEN)	None	10/5/2007 12:01:00 PM		0	2	0	2	0.9353	0.9521	0.9437	0.0118	1.77%
K_Ions_Grab (SHEN)	µeq/L	10/5/2007 12:01:00 PM		0	2	0	2	43.95	44.07	44.01	0.0843	0.27%
Mg_Ions_Grab (SHEN)	µeq/L	10/5/2007 12:01:00 PM		0	2	0	2	191.9	192.7	192.3	0.5221	0.38%
Na_Ions_Grab (SHEN)	µeq/L	10/5/2007 12:01:00 PM		0	2	0	2	108.8	109	108.9	0.1775	0.23%
NH4_Ions_Grab (SHEN)	µeq/L	10/5/2007 12:01:00 PM		0	2	0	2	12.66	23.35	18	7.558	59.38%
NO3_Ions_Grab (SHEN)	µeq/L	10/5/2007 12:01:00 PM		0	2	0	2	0.794	0.8925	0.8433	0.0696	11.68%
pH_Metrohm_Grab (SHEN)	None	10/5/2007 12:01:00 PM			2	0	2	6.532	6.544	6.538	0.0085	0.18%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	10/5/2007 12:01:00 PM		0	2	0	2	644.4	644.4	644.4	0.0155	0.00%
SBC_IC2_GRAB (SHEN)	µeq/L	10/5/2007 12:01:00 PM		0	2	0	2	676.8	689	682.9	8.59	1.78%
SiO2_TC_Grab (SHEN)	µmol/L	10/5/2007 12:01:00 PM		0	2	0	2	321.9	322.3	322.1	0.2759	0.12%
SO4_Ions_Grab (SHEN)	µeq/L	10/5/2007 12:01:00 PM		0	2	0	2	9.697	9.781	9.739	0.0598	0.87%

NPSTORET Precision Analysis

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Project ID: SOURCH2O **Station ID:** SP3009 **Station Name:** unmapped spring

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	10/9/2007 3:25:00 PM			2	0	2	74.79	77.03	75.91	1.584	2.95%
Ca_Ions_Grab (SHEN)	µeq/L	10/9/2007 3:25:00 PM		0	2	0	2	35.1	35.93	35.51	0.5863	2.33%
Cl_Ions_Grab (SHEN)	µeq/L	10/9/2007 3:25:00 PM		0	2	0	2	21.81	21.85	21.83	0.0239	0.15%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	10/9/2007 3:25:00 PM		0	2	0	2	11.2	11.2	11.2	0	0.00%
IONRATIO_MET_IC2_GRAB (SHEN)	None	10/9/2007 3:25:00 PM		0	2	0	2	0.9877	1.008	0.998	0.0145	2.06%
K_Ions_Grab (SHEN)	µeq/L	10/9/2007 3:25:00 PM		0	2	0	2	11.49	11.55	11.52	0.0468	0.57%
Mg_Ions_Grab (SHEN)	µeq/L	10/9/2007 3:25:00 PM		0	2	0	2	19.71	19.94	19.83	0.1638	1.17%
Na_Ions_Grab (SHEN)	µeq/L	10/9/2007 3:25:00 PM		0	2	0	2	45.2	45.47	45.34	0.1872	0.58%
NH4_Ions_Grab (SHEN)	µeq/L	10/9/2007 3:25:00 PM		0	2	0	2	0.4907	3.833	2.162	2.364	154.61%
NO3_Ions_Grab (SHEN)	µeq/L	10/9/2007 3:25:00 PM		0	2	0	2	10.81	13.55	12.18	1.943	22.56%
pH_Metrohm_Grab (SHEN)	None	10/9/2007 3:25:00 PM			2	0	2	6.069	6.096	6.083	0.0196	0.46%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	10/9/2007 3:25:00 PM		0	2	0	2	113.9	114.3	114.1	0.2852	0.35%
SBC_IC2_GRAB (SHEN)	µeq/L	10/9/2007 3:25:00 PM		0	2	0	2	113.4	115.3	114.4	1.38	1.71%
SiO2_TC_Grab (SHEN)	µmol/L	10/9/2007 3:25:00 PM		144	2	0	2	122.7	122.7	122.7	0.0556	0.06%
SO4_Ions_Grab (SHEN)	µeq/L	10/9/2007 3:25:00 PM		0	2	0	2	4.164	4.235	4.199	0.0503	1.70%

Project ID: SOURCH2O **Station ID:** SP3013 **Station Name:** Dekay spring box

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	10/16/2007 9:32:00 AM			2	0	2	188.5	191.2	189.9	1.927	1.43%
Ca_Ions_Grab (SHEN)	µeq/L	10/16/2007 9:32:00 AM		0	2	0	2	160.9	161	160.9	0.064	0.06%
Cl_Ions_Grab (SHEN)	µeq/L	10/16/2007 9:32:00 AM		0	2	0	2	39.22	39.22	39.22	0	0.00%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	10/16/2007 9:32:00 AM		0	2	0	2	29	29.1	29.05	0.0707	0.34%

NPSTORET Precision Analysis

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Project ID: SOURCH2O **Station ID:** SP3013 **Station Name:** Dekay spring box

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
IONRATIO_MET_IC2_GRAB (SHEN)	None	10/16/2007 9:32:00 AM		0	2	0	2	0.9268	0.9671	0.9469	0.0285	4.25%
K_Ions_Grab (SHEN)	µeq/L	10/16/2007 9:32:00 AM		0	2	0	2	13.4	13.46	13.43	0.0453	0.48%
Mg_Ions_Grab (SHEN)	µeq/L	10/16/2007 9:32:00 AM		0	2	0	2	51.68	51.73	51.71	0.032	0.09%
Na_Ions_Grab (SHEN)	µeq/L	10/16/2007 9:32:00 AM		0	2	0	2	64.71	64.77	64.74	0.0387	0.08%
NH4_Ions_Grab (SHEN)	µeq/L	10/16/2007 9:32:00 AM		0	2	0	2	2.934	11.07	7.002	5.753	116.20%
NO3_Ions_Grab (SHEN)	µeq/L	10/16/2007 9:32:00 AM		0	2	0	2	28.36	30.02	29.19	1.17	5.67%
pH_Metrohm_Grab (SHEN)	None	10/16/2007 9:32:00 AM			2	0	2	6.212	6.218	6.215	0.004	0.09%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	10/16/2007 9:32:00 AM		0	2	0	2	279.8	284	281.9	2.998	1.50%
SBC_IC2_GRAB (SHEN)	µeq/L	10/16/2007 9:32:00 AM		0	2	0	2	293.7	301.9	297.8	5.792	2.75%
SiO2_TC_Grab (SHEN)	µmol/L	10/16/2007 9:32:00 AM		0	2	0	2	148.9	149.7	149.3	0.5514	0.52%
SO4_Ions_Grab (SHEN)	µeq/L	10/16/2007 9:32:00 AM		0	2	0	2	23.56	23.7	23.63	0.0993	0.59%

Project ID: SOURCH2O **Station ID:** SP39 **Station Name:** Gravel Springs

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	10/1/2007 4:47:00 PM			2	0	2	373.2	373.5	373.4	0.2001	0.08%
Ca_Ions_Grab (SHEN)	µeq/L	10/1/2007 4:47:00 PM		0	2	0	2	244.2	245	244.6	0.5682	0.33%
Cl_Ions_Grab (SHEN)	µeq/L	10/1/2007 4:47:00 PM		0	2	0	2	27.72	27.8	27.76	0.0578	0.29%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	10/1/2007 4:47:00 PM		0	2	0	2	44.3	44.6	44.45	0.2121	0.67%
IONRATIO_MET_IC2_GRAB (SHEN)	None	10/1/2007 4:47:00 PM		0	2	0	2	0.9564	0.9615	0.9589	0.0036	0.53%
K_Ions_Grab (SHEN)	µeq/L	10/1/2007 4:47:00 PM		0	2	0	2	6.882	6.89	6.886	0.0055	0.11%
Mg_Ions_Grab (SHEN)	µeq/L	10/1/2007 4:47:00 PM		0	2	0	2	153.8	153.9	153.9	0.0223	0.02%
Na_Ions_Grab (SHEN)	µeq/L	10/1/2007 4:47:00 PM		0	2	0	2	92.86	93.02	92.94	0.1182	0.18%
NH4_Ions_Grab (SHEN)	µeq/L	10/1/2007 4:47:00 PM		0	2	1	1	<0.013	0.238	0.238	***	***

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Project ID: SOURCH2O **Station ID:** SP39 **Station Name:** Gravel Springs

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
NO3_Ions_Grab (SHEN)	µeq/L	10/1/2007 4:47:00 PM		0	2	0	2	54.47	57.91	56.19	2.437	6.13%
pH_Metrohm_Grab (SHEN)	None	10/1/2007 4:47:00 PM			2	0	2	6.639	6.719	6.679	0.0566	1.20%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	10/1/2007 4:47:00 PM		0	2	0	2	476	479.8	477.9	2.633	0.78%
SBC_IC2_GRAB (SHEN)	µeq/L	10/1/2007 4:47:00 PM		0	2	0	2	497.8	499	498.4	0.867	0.25%
SiO2_TC_Grab (SHEN)	µmol/L	10/1/2007 4:47:00 PM		0	2	0	2	269.8	272.5	271.2	1.92	1.00%
SO4_Ions_Grab (SHEN)	µeq/L	10/1/2007 4:47:00 PM		0	2	0	2	20.54	20.63	20.59	0.0612	0.42%

Project ID: SOURCH2O **Station ID:** SP8 **Station Name:** spring on trib just north of Sawmill Run Ranger Station

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	10/10/2007 1:53:00 PM			2	0	2	30.17	30.33	30.25	0.1189	0.56%
Ca_Ions_Grab (SHEN)	µeq/L	10/10/2007 1:53:00 PM		0	2	0	2	10.47	11.47	10.97	0.7093	9.14%
Cl_Ions_Grab (SHEN)	µeq/L	10/10/2007 1:53:00 PM		0	2	0	2	22.25	22.65	22.45	0.2846	1.79%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	10/10/2007 1:53:00 PM		0	2	0	2	6.4	6.7	6.55	0.2121	4.58%
IONRATIO_MET_IC2_GRAB (SHEN)	None	10/10/2007 1:53:00 PM		0	2	0	2	1.035	1.051	1.043	0.0112	1.52%
K_Ions_Grab (SHEN)	µeq/L	10/10/2007 1:53:00 PM		0	2	0	2	8.725	8.969	8.847	0.1729	2.76%
Mg_Ions_Grab (SHEN)	µeq/L	10/10/2007 1:53:00 PM		0	2	0	2	13.27	13.79	13.53	0.3663	3.83%
Na_Ions_Grab (SHEN)	µeq/L	10/10/2007 1:53:00 PM		0	2	0	2	22.7	23.16	22.93	0.3237	2.00%
NH4_Ions_Grab (SHEN)	µeq/L	10/10/2007 1:53:00 PM		0	2	2	0	<0.013	<0.013	***	***	***
NO3_Ions_Grab (SHEN)	µeq/L	10/10/2007 1:53:00 PM		0	2	1	1	<0.081	0.7923	0.7923	***	***
pH_Metrohm_Grab (SHEN)	None	10/10/2007 1:53:00 PM			2	0	2	5.756	5.826	5.791	0.0501	1.22%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	10/10/2007 1:53:00 PM		0	2	0	2	58.01	59.43	58.72	1.009	2.43%
SBC_IC2_GRAB (SHEN)	µeq/L	10/10/2007 1:53:00 PM		0	2	0	2	55.18	57.4	56.29	1.572	3.95%

NPSTORET Precision Analysis

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Project ID: SOURCH2O **Station ID:** SP8 **Station Name:** spring on trib just north of Sawmill Run Ranger Station

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
SiO2_TC_Grab (SHEN)	µmol/L	10/10/2007 1:53:00 PM		0	2	0	2	121.8	122	121.9	0.136	0.16%
SO4_Ions_Grab (SHEN)	µeq/L	10/10/2007 1:53:00 PM		0	2	0	2	5.554	5.658	5.606	0.0735	1.86%
T_AL_TC_Grab (SHEN)	µg/l	10/10/2007 1:53:00 PM		0	2	0	2	28.04	29.1	28.57	0.7475	3.70%

Project ID: SOURCH2O **Station ID:** SW148 **Station Name:** Happy Creek

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	5/25/2007 11:30:00 AM		0	2	0	2	498	502.6	500.3	3.242	0.92%
Ca_Ions_Grab (SHEN)	µeq/L	5/25/2007 11:30:00 AM		0	2	0	2	263.1	263.1	263.1	0.02	0.01%
Cl_Ions_Grab (SHEN)	µeq/L	5/25/2007 11:30:00 AM		0	2	0	2	42.87	43.16	43.02	0.2047	0.67%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	5/25/2007 11:30:00 AM		0	2	0	2	54.9	55	54.95	0.0707	0.18%
IONRATIO_MET_IC2_GRAB (SHEN)	None	5/25/2007 11:30:00 AM		0	2	0	2	0.9454	0.9482	0.9468	0.0021	0.31%
K_Ions_Grab (SHEN)	µeq/L	5/25/2007 11:30:00 AM		0	2	0	2	11.44	11.5	11.47	0.0379	0.47%
Mg_Ions_Grab (SHEN)	µeq/L	5/25/2007 11:30:00 AM		0	2	0	2	226.8	226.9	226.8	0.0762	0.05%
Na_Ions_Grab (SHEN)	µeq/L	5/25/2007 11:30:00 AM		0	2	0	2	127.9	128.2	128	0.2008	0.22%
NH4_Ions_Grab (SHEN)	µeq/L	5/25/2007 11:30:00 AM		0	2	1	1	<0.013	2.313	2.313	***	***
NO3_Ions_Grab (SHEN)	µeq/L	5/25/2007 11:30:00 AM		0	2	2	0	<0.081	<0.081	***	***	***
pH_Metrohm_Grab (SHEN)	None	5/25/2007 11:30:00 AM		0	2	0	2	7.045	7.078	7.062	0.0237	0.47%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	5/25/2007 11:30:00 AM		0	2	0	2	595.2	599	597.1	2.701	0.64%
SBC_IC2_GRAB (SHEN)	µeq/L	5/25/2007 11:30:00 AM		0	2	0	2	629.6	631.7	630.6	1.488	0.33%
SiO2_TC_Grab (SHEN)	µmol/L	5/25/2007 11:30:00 AM		0	2	0	2	352.3	354.6	353.5	1.628	0.65%
SO4_Ions_Grab (SHEN)	µeq/L	5/25/2007 11:30:00 AM		0	2	0	2	53.45	53.93	53.69	0.3363	0.89%

NPSTORET Precision Analysis

Filtered Results

Project ID: SOURCH2O **Station ID:** SW161 **Station Name:** Compton Hollow

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	6/4/2007 4:40:00 PM		0	2	0	2	382.8	382.9	382.8	0.0786	0.03%
Ca_Ions_Grab (SHEN)	µeq/L	6/4/2007 4:40:00 PM		0	2	0	2	247.4	248.5	248	0.8255	0.47%
Cl_Ions_Grab (SHEN)	µeq/L	6/4/2007 4:40:00 PM		0	2	0	2	26.9	26.91	26.91	0.0122	0.06%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	6/4/2007 4:40:00 PM		0	2	0	2	50.8	51.3	51.05	0.3536	0.98%
IONRATIO_MET_IC2_GRAB (SHEN)	None	6/4/2007 4:40:00 PM		0	2	0	2	0.921	0.9261	0.9235	0.0036	0.55%
K_Ions_Grab (SHEN)	µeq/L	6/4/2007 4:40:00 PM		0	2	0	2	6.39	6.51	6.45	0.0849	1.86%
Mg_Ions_Grab (SHEN)	µeq/L	6/4/2007 4:40:00 PM		0	2	0	2	178.5	180.1	179.3	1.159	0.91%
Na_Ions_Grab (SHEN)	µeq/L	6/4/2007 4:40:00 PM		0	2	0	2	129.3	129.7	129.5	0.2709	0.30%
NH4_Ions_Grab (SHEN)	µeq/L	6/4/2007 4:40:00 PM		0	2	1	1	<0.013	0.3502	0.3502	***	***
NO3_Ions_Grab (SHEN)	µeq/L	6/4/2007 4:40:00 PM		0	2	0	2	1.387	1.642	1.515	0.1799	16.80%
pH_Metrohm_Grab (SHEN)	None	6/4/2007 4:40:00 PM		0	2	0	2	7.272	7.295	7.284	0.0163	0.32%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	6/4/2007 4:40:00 PM		0	2	0	2	520.2	520.4	520.3	0.1899	0.05%
SBC_IC2_GRAB (SHEN)	µeq/L	6/4/2007 4:40:00 PM		0	2	0	2	561.7	565.1	563.4	2.413	0.61%
SiO2_TC_Grab (SHEN)	µmol/L	6/4/2007 4:40:00 PM		0	2	0	2	308.6	308.6	308.6	0	0.00%
SO4_Ions_Grab (SHEN)	µeq/L	6/4/2007 4:40:00 PM		0	2	0	2	109	109.1	109	0.1008	0.13%

Project ID: SOURCH2O **Station ID:** SW165 **Station Name:** Jeremys Run near Elkwallow Shelter

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	10/20/2007 10:30:00 AM			2	0	2	431.7	434.4	433	1.932	0.63%
Ca_Ions_Grab (SHEN)	µeq/L	10/20/2007 10:30:00 AM		0	2	0	2	261.3	264.2	262.7	2.014	1.08%
Cl_Ions_Grab (SHEN)	µeq/L	10/20/2007 10:30:00 AM		0	2	0	2	79.95	80.17	80.06	0.1544	0.27%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	10/20/2007 10:30:00 AM		0	2	0	2	57.3	57.4	57.35	0.0707	0.17%

NPSTORET Precision Analysis

Filtered Results

Project ID: SOURCH2O **Station ID:** SW165 **Station Name:** Jeremys Run near Elkwallow Shelter

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
IONRATIO_MET_IC2_GRAB (SHEN)	None	10/20/2007 10:30:00 AM		0	2	0	2	0.9536	0.9548	0.9542	0.0009	0.13%
K_Ions_Grab (SHEN)	µeq/L	10/20/2007 10:30:00 AM		0	2	0	2	12.28	12.85	12.56	0.4031	4.54%
Mg_Ions_Grab (SHEN)	µeq/L	10/20/2007 10:30:00 AM		0	2	0	2	221	222.6	221.8	1.146	0.73%
Na_Ions_Grab (SHEN)	µeq/L	10/20/2007 10:30:00 AM		0	2	0	2	132.9	133	133	0.0743	0.08%
NH4_Ions_Grab (SHEN)	µeq/L	10/20/2007 10:30:00 AM		0	2	1	1	<0.013	0.294	0.294	***	***
NO3_Ions_Grab (SHEN)	µeq/L	10/20/2007 10:30:00 AM		0	2	0	2	5.639	12.48	9.057	4.834	75.48%
pH_Metrohm_Grab (SHEN)	None	10/20/2007 10:30:00 AM			2	0	2	7.152	7.189	7.17	0.0258	0.51%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	10/20/2007 10:30:00 AM		0	2	0	2	599.3	603.5	601.4	2.982	0.70%
SBC_IC2_GRAB (SHEN)	µeq/L	10/20/2007 10:30:00 AM		0	2	0	2	627.7	632.9	630.3	3.692	0.83%
SiO2_TC_Grab (SHEN)	µmol/L	10/20/2007 10:30:00 AM		0	2	0	2	252.7	254.3	253.5	1.109	0.62%
SO4_Ions_Grab (SHEN)	µeq/L	10/20/2007 10:30:00 AM		0	2	0	2	79.08	79.41	79.24	0.234	0.42%

Project ID: SOURCH2O **Station ID:** SW179 **Station Name:** Beech Spring Hollow

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	5/30/2007 3:20:00 PM		0	2	0	2	173.5	174.2	173.9	0.4466	0.36%
Ca_Ions_Grab (SHEN)	µeq/L	5/30/2007 3:20:00 PM		0	2	0	2	89.93	90.35	90.14	0.2954	0.46%
Cl_Ions_Grab (SHEN)	µeq/L	5/30/2007 3:20:00 PM		0	2	0	2	24.24	24.42	24.33	0.1255	0.73%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	5/30/2007 3:20:00 PM		0	2	0	2	24.7	24.7	24.7	0	0.00%
IONRATIO_MET_IC2_GRAB (SHEN)	None	5/30/2007 3:20:00 PM		0	2	0	2	0.9241	0.9274	0.9258	0.0024	0.36%
K_Ions_Grab (SHEN)	µeq/L	5/30/2007 3:20:00 PM		0	2	0	2	11.28	11.32	11.3	0.0287	0.36%
Mg_Ions_Grab (SHEN)	µeq/L	5/30/2007 3:20:00 PM		0	2	0	2	65.33	65.65	65.49	0.2199	0.47%
Na_Ions_Grab (SHEN)	µeq/L	5/30/2007 3:20:00 PM		0	2	0	2	99.69	99.75	99.72	0.042	0.06%
NH4_Ions_Grab (SHEN)	µeq/L	5/30/2007 3:20:00 PM		0	2	2	0	<0.013	<0.013	***	***	***

NPSTORET Precision Analysis

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Project ID: SOURCH2O **Station ID:** SW179 **Station Name:** Beech Spring Hollow

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
NO3_Ions_Grab (SHEN)	µeq/L	5/30/2007 3:20:00 PM		0	2	2	0	<0.081	<0.081	***	***	***
pH_Metrohm_Grab (SHEN)	None	5/30/2007 3:20:00 PM		0	2	0	2	6.808	6.831	6.82	0.016	0.33%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	5/30/2007 3:20:00 PM		0	2	0	2	246.8	246.9	246.9	0.0905	0.05%
SBC_IC2_GRAB (SHEN)	µeq/L	5/30/2007 3:20:00 PM		0	2	0	2	266.2	267.1	266.7	0.5859	0.31%
SiO2_TC_Grab (SHEN)	µmol/L	5/30/2007 3:20:00 PM		0	2	0	2	248.1	248.5	248.3	0.2731	0.16%
SO4_Ions_Grab (SHEN)	µeq/L	5/30/2007 3:20:00 PM		0	2	0	2	48.34	48.92	48.63	0.4116	1.20%

Project ID: SOURCH2O **Station ID:** SW181 **Station Name:** North Fork Dry Run

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	10/28/2007 3:40:00 PM		0	2	0	2	35.65	36.07	35.86	0.299	1.18%
Ca_Ions_Grab (SHEN)	µeq/L	10/28/2007 3:40:00 PM		0	2	0	2	107.6	108.7	108.2	0.7473	0.98%
Cl_Ions_Grab (SHEN)	µeq/L	10/28/2007 3:40:00 PM		0	2	0	2	39.17	40.61	39.89	1.019	3.61%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	10/28/2007 3:40:00 PM		0	2	0	2	28.7	29	28.85	0.2121	1.04%
IONRATIO_MET_IC2_GRAB (SHEN)	None	10/28/2007 3:40:00 PM		0	2	0	2	0.9204	0.9571	0.9387	0.026	3.91%
K_Ions_Grab (SHEN)	µeq/L	10/28/2007 3:40:00 PM		0	2	0	2	9.898	10.61	10.25	0.5027	6.94%
Mg_Ions_Grab (SHEN)	µeq/L	10/28/2007 3:40:00 PM		0	2	0	2	65.29	65.76	65.52	0.334	0.72%
Na_Ions_Grab (SHEN)	µeq/L	10/28/2007 3:40:00 PM		0	2	0	2	81.16	82.49	81.83	0.9396	1.62%
NH4_Ions_Grab (SHEN)	µeq/L	10/28/2007 3:40:00 PM		0	2	2	0	<0.013	<0.013	***	***	***
NO3_Ions_Grab (SHEN)	µeq/L	10/28/2007 3:40:00 PM		0	2	0	2	69.97	78.21	74.09	5.823	11.11%
pH_Metrohm_Grab (SHEN)	None	10/28/2007 3:40:00 PM		0	2	0	2	6.287	6.347	6.317	0.0426	0.95%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	10/28/2007 3:40:00 PM		0	2	0	2	246.3	252.7	249.5	4.53	2.57%
SBC_IC2_GRAB (SHEN)	µeq/L	10/28/2007 3:40:00 PM		0	2	0	2	264	267.6	265.8	2.524	1.34%

NPSTORET Precision Analysis

Filtered Results

Project ID: SOURCH2O **Station ID:** SW181 **Station Name:** North Fork Dry Run

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
SiO2_TC_Grab (SHEN)	µmol/L	10/28/2007 3:40:00 PM		0	2	0	2	148.5	148.7	148.6	0.1386	0.13%
SO4_Ions_Grab (SHEN)	µeq/L	10/28/2007 3:40:00 PM		0	2	0	2	99.61	99.64	99.62	0.0246	0.03%

Project ID: SOURCH2O **Station ID:** SW182 **Station Name:** Hazel River

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	5/29/2007 2:20:00 PM		0	2	0	2	96.8	98.42	97.61	1.145	1.66%
Ca_Ions_Grab (SHEN)	µeq/L	5/29/2007 2:20:00 PM		0	2	0	2	57.37	57.87	57.62	0.3514	0.86%
Cl_Ions_Grab (SHEN)	µeq/L	5/29/2007 2:20:00 PM		0	2	0	2	19.92	20.05	19.99	0.0932	0.66%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	5/29/2007 2:20:00 PM		0	2	0	2	16	16.3	16.15	0.2121	1.86%
IONRATIO_MET_IC2_GRAB (SHEN)	None	5/29/2007 2:20:00 PM		0	2	0	2	0.8085	0.8229	0.8157	0.0101	1.76%
K_Ions_Grab (SHEN)	µeq/L	5/29/2007 2:20:00 PM		0	2	0	2	12.15	12.2	12.18	0.0356	0.41%
Mg_Ions_Grab (SHEN)	µeq/L	5/29/2007 2:20:00 PM		0	2	0	2	43.28	43.55	43.41	0.1938	0.63%
Na_Ions_Grab (SHEN)	µeq/L	5/29/2007 2:20:00 PM		0	2	0	2	52.75	52.77	52.76	0.014	0.04%
NH4_Ions_Grab (SHEN)	µeq/L	5/29/2007 2:20:00 PM		0	2	0	2	1.426	1.92	1.673	0.3492	29.52%
NO3_Ions_Grab (SHEN)	µeq/L	5/29/2007 2:20:00 PM		0	2	0	2	3.892	8.024	5.958	2.922	69.35%
pH_Metrohm_Grab (SHEN)	None	5/29/2007 2:20:00 PM		0	2	0	2	6.781	6.819	6.8	0.027	0.56%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	5/29/2007 2:20:00 PM		0	2	0	2	135.7	137.8	136.7	1.526	1.58%
SBC_IC2_GRAB (SHEN)	µeq/L	5/29/2007 2:20:00 PM		0	2	0	2	167.5	167.8	167.6	0.2131	0.18%
SiO2_TC_Grab (SHEN)	µmol/L	5/29/2007 2:20:00 PM		0	2	0	2	145.3	145.3	145.3	0	0.00%
SO4_Ions_Grab (SHEN)	µeq/L	5/29/2007 2:20:00 PM		0	2	0	2	13.07	13.29	13.18	0.1569	1.68%

NPSTORET Precision Analysis

Filtered Results

Project ID: SOURCH2O **Station ID:** SW183 **Station Name:** Hughes River

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	10/13/2007 2:30:00 PM			2	0	2	118.1	118.4	118.2	0.246	0.29%
Ca_Ions_Grab (SHEN)	µeq/L	10/13/2007 2:30:00 PM		0	2	0	2	77.58	78.18	77.88	0.425	0.77%
Cl_Ions_Grab (SHEN)	µeq/L	10/13/2007 2:30:00 PM		0	2	0	2	58.65	58.77	58.71	0.0867	0.21%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	10/13/2007 2:30:00 PM		0	2	0	2	18.8	18.8	18.8	0	0.00%
IONRATIO_MET_IC2_GRAB (SHEN)	None	10/13/2007 2:30:00 PM		0	2	0	2	0.9315	0.934	0.9327	0.0017	0.26%
K_Ions_Grab (SHEN)	µeq/L	10/13/2007 2:30:00 PM		0	2	0	2	10.36	10.44	10.4	0.0608	0.83%
Mg_Ions_Grab (SHEN)	µeq/L	10/13/2007 2:30:00 PM		0	2	0	2	47.89	48.05	47.97	0.1111	0.33%
Na_Ions_Grab (SHEN)	µeq/L	10/13/2007 2:30:00 PM		0	2	0	2	66.8	67.17	66.99	0.257	0.54%
NH4_Ions_Grab (SHEN)	µeq/L	10/13/2007 2:30:00 PM		0	2	2	0	<0.013	<0.013	***	***	***
NO3_Ions_Grab (SHEN)	µeq/L	10/13/2007 2:30:00 PM		0	2	2	0	<0.081	<0.081	***	***	***
pH_Metrohm_Grab (SHEN)	None	10/13/2007 2:30:00 PM			2	0	2	6.772	6.821	6.796	0.0345	0.72%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	10/13/2007 2:30:00 PM		0	2	0	2	189.3	189.8	189.6	0.3509	0.26%
SBC_IC2_GRAB (SHEN)	µeq/L	10/13/2007 2:30:00 PM		0	2	0	2	203.2	203.2	203.2	0.0039	0.00%
SiO2_TC_Grab (SHEN)	µmol/L	10/13/2007 2:30:00 PM		0	2	0	2	163.8	164.3	164	0.4148	0.36%
SO4_Ions_Grab (SHEN)	µeq/L	10/13/2007 2:30:00 PM		0	2	0	2	12.59	12.61	12.6	0.0182	0.20%

Project ID: SOURCH2O **Station ID:** SW217 **Station Name:** Mill Prong

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	10/12/2007 12:10:00 PM			2	0	2	210.2	210.2	210.2	0.0198	0.01%
Ca_Ions_Grab (SHEN)	µeq/L	10/12/2007 12:10:00 PM		0	2	0	2	121.2	122.9	122	1.19	1.38%
Cl_Ions_Grab (SHEN)	µeq/L	10/12/2007 12:10:00 PM		0	2	0	2	38.06	38.41	38.23	0.2437	0.90%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	10/12/2007 12:10:00 PM		0	2	0	2	24.3	24.4	24.35	0.0707	0.41%

NPSTORET Precision Analysis

Filtered Results

Project ID: SOURCH2O **Station ID:** SW217 **Station Name:** Mill Prong

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
IONRATIO_MET_IC2_GRAB (SHEN)	None	10/12/2007 12:10:00 PM		0	2	0	2	0.9498	0.9583	0.954	0.0061	0.90%
K_Ions_Grab (SHEN)	µeq/L	10/12/2007 12:10:00 PM		0	2	0	2	3.783	3.847	3.815	0.0452	1.68%
Mg_Ions_Grab (SHEN)	µeq/L	10/12/2007 12:10:00 PM		0	2	0	2	104.7	105.3	105	0.4297	0.58%
Na_Ions_Grab (SHEN)	µeq/L	10/12/2007 12:10:00 PM		0	2	0	2	46.92	46.99	46.95	0.0485	0.15%
NH4_Ions_Grab (SHEN)	µeq/L	10/12/2007 12:10:00 PM		0	2	2	0	<0.013	<0.013	***	***	***
NO3_Ions_Grab (SHEN)	µeq/L	10/12/2007 12:10:00 PM		0	2	2	0	<0.081	<0.081	***	***	***
pH_Metrohm_Grab (SHEN)	None	10/12/2007 12:10:00 PM			2	0	2	6.838	6.844	6.841	0.004	0.08%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	10/12/2007 12:10:00 PM		0	2	0	2	265	265.2	265.1	0.139	0.07%
SBC_IC2_GRAB (SHEN)	µeq/L	10/12/2007 12:10:00 PM		0	2	0	2	276.7	279	277.9	1.624	0.83%
SiO2_TC_Grab (SHEN)	µmol/L	10/12/2007 12:10:00 PM		0	2	0	2	141.3	141.5	141.4	0.1376	0.14%
SO4_Ions_Grab (SHEN)	µeq/L	10/12/2007 12:10:00 PM		0	2	0	2	16.58	16.7	16.64	0.0848	0.72%

Project ID: SOURCH2O **Station ID:** SW224 **Station Name:** Staunton River

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	6/5/2007 6:30:00 PM		0	2	0	2	62.01	62.2	62.1	0.132	0.30%
Ca_Ions_Grab (SHEN)	µeq/L	6/5/2007 6:30:00 PM		0	2	0	2	39.67	40.75	40.21	0.7679	2.70%
Cl_Ions_Grab (SHEN)	µeq/L	6/5/2007 6:30:00 PM		0	2	0	2	15.19	15.77	15.48	0.4133	3.78%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	6/5/2007 6:30:00 PM		0	2	0	2	10.5	10.7	10.6	0.1414	1.89%
IONRATIO_MET_IC2_GRAB (SHEN)	None	6/5/2007 6:30:00 PM		0	2	0	2	0.8357	0.8425	0.8391	0.0048	0.81%
K_Ions_Grab (SHEN)	µeq/L	6/5/2007 6:30:00 PM		0	2	0	2	8.793	8.908	8.85	0.0815	1.30%
Mg_Ions_Grab (SHEN)	µeq/L	6/5/2007 6:30:00 PM		0	2	0	2	19.46	19.51	19.48	0.0339	0.25%
Na_Ions_Grab (SHEN)	µeq/L	6/5/2007 6:30:00 PM		0	2	0	2	39.73	39.9	39.82	0.1173	0.42%
NH4_Ions_Grab (SHEN)	µeq/L	6/5/2007 6:30:00 PM		0	2	2	0	<0.013	<0.013	***	***	***

NPSTORET Precision Analysis

Filtered Results

Project ID: SOURCH2O **Station ID:** SW224 **Station Name:** Staunton River

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
NO3_Ions_Grab (SHEN)	µeq/L	6/5/2007 6:30:00 PM		0	2	2	0	<0.081	<0.081	***	***	***
pH_Metrohm_Grab (SHEN)	None	6/5/2007 6:30:00 PM		0	2	0	2	6.634	6.653	6.643	0.0132	0.28%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	6/5/2007 6:30:00 PM		0	2	0	2	90.88	90.98	90.93	0.074	0.12%
SBC_IC2_GRAB (SHEN)	µeq/L	6/5/2007 6:30:00 PM		0	2	0	2	108	108.7	108.4	0.5353	0.70%
SiO2_TC_Grab (SHEN)	µmol/L	6/5/2007 6:30:00 PM		0	2	0	2	113.8	114	113.9	0.1379	0.17%
SO4_Ions_Grab (SHEN)	µeq/L	6/5/2007 6:30:00 PM		0	2	0	2	13.16	13.45	13.31	0.2074	2.20%

Project ID: SOURCH2O **Station ID:** SW240 **Station Name:** South River

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	5/31/2007 4:30:00 PM		0	2	0	2	215.9	217.2	216.5	0.9608	0.63%
Ca_Ions_Grab (SHEN)	µeq/L	5/31/2007 4:30:00 PM		0	2	0	2	150.2	150.5	150.3	0.1914	0.18%
Cl_Ions_Grab (SHEN)	µeq/L	5/31/2007 4:30:00 PM		0	2	0	2	21.74	21.82	21.78	0.0557	0.36%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	5/31/2007 4:30:00 PM		0	2	0	2	29.1	29.2	29.15	0.0707	0.34%
IONRATIO_MET_IC2_GRAB (SHEN)	None	5/31/2007 4:30:00 PM		0	2	0	2	0.8785	0.8846	0.8816	0.0043	0.68%
K_Ions_Grab (SHEN)	µeq/L	5/31/2007 4:30:00 PM		0	2	0	2	4.742	4.749	4.746	0.005	0.15%
Mg_Ions_Grab (SHEN)	µeq/L	5/31/2007 4:30:00 PM		0	2	0	2	94.57	94.67	94.62	0.072	0.11%
Na_Ions_Grab (SHEN)	µeq/L	5/31/2007 4:30:00 PM		0	2	0	2	67.8	68	67.9	0.142	0.30%
NH4_Ions_Grab (SHEN)	µeq/L	5/31/2007 4:30:00 PM		0	2	0	2	3.009	7.092	5.05	2.886	80.83%
NO3_Ions_Grab (SHEN)	µeq/L	5/31/2007 4:30:00 PM		0	2	0	2	18.74	19.26	19	0.3729	2.78%
pH_Metrohm_Grab (SHEN)	None	5/31/2007 4:30:00 PM		0	2	0	2	6.999	7.035	7.017	0.026	0.52%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	5/31/2007 4:30:00 PM		0	2	0	2	283.9	285	284.4	0.8083	0.40%
SBC_IC2_GRAB (SHEN)	µeq/L	5/31/2007 4:30:00 PM		0	2	0	2	320.9	324.4	322.7	2.476	1.09%

NPSTORET Precision Analysis

Filtered Results

Project ID: SOURCH2O **Station ID:** SW240 **Station Name:** South River

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
SiO2_TC_Grab (SHEN)	µmol/L	5/31/2007 4:30:00 PM		0	2	0	2	177.7	177.7	177.7	0	0.00%
SO4_Ions_Grab (SHEN)	µeq/L	5/31/2007 4:30:00 PM		0	2	0	2	27.02	27.25	27.13	0.1648	0.86%

Project ID: SOURCH2O **Station ID:** SW251 **Station Name:** Gap Run

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	6/6/2007 12:40:00 PM		0	2	0	2	17.85	18.86	18.36	0.7176	5.53%
Ca_Ions_Grab (SHEN)	µeq/L	6/6/2007 12:40:00 PM		0	2	0	2	17.04	17.83	17.44	0.5608	4.55%
Cl_Ions_Grab (SHEN)	µeq/L	6/6/2007 12:40:00 PM		0	2	0	2	20.01	20.4	20.2	0.2776	1.94%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	6/6/2007 12:40:00 PM		0	2	0	2	16.3	16.4	16.35	0.0707	0.61%
IONRATIO_MET_IC2_GRAB (SHEN)	None	6/6/2007 12:40:00 PM		0	2	0	2	0.9191	0.9339	0.9265	0.0105	1.60%
K_Ions_Grab (SHEN)	µeq/L	6/6/2007 12:40:00 PM		0	2	0	2	43.89	44.07	43.98	0.1241	0.40%
Mg_Ions_Grab (SHEN)	µeq/L	6/6/2007 12:40:00 PM		0	2	0	2	43.26	44.21	43.74	0.6707	2.17%
Na_Ions_Grab (SHEN)	µeq/L	6/6/2007 12:40:00 PM		0	2	0	2	21.51	21.61	21.56	0.0681	0.45%
NH4_Ions_Grab (SHEN)	µeq/L	6/6/2007 12:40:00 PM		0	2	1	1	<0.013	0.2036	0.2036	***	***
NO3_Ions_Grab (SHEN)	µeq/L	6/6/2007 12:40:00 PM		0	2	0	2	3.025	4.094	3.559	0.756	30.04%
pH_Metrohm_Grab (SHEN)	None	6/6/2007 12:40:00 PM		0	2	0	2	5.545	5.554	5.55	0.0066	0.17%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	6/6/2007 12:40:00 PM		0	2	0	2	116.5	118.5	117.5	1.477	1.78%
SBC_IC2_GRAB (SHEN)	µeq/L	6/6/2007 12:40:00 PM		0	2	0	2	126.7	126.9	126.8	0.1627	0.18%
SiO2_TC_Grab (SHEN)	µmol/L	6/6/2007 12:40:00 PM		0	2	0	2	93.53	94.11	93.82	0.4123	0.62%
SO4_Ions_Grab (SHEN)	µeq/L	6/6/2007 12:40:00 PM		0	2	0	2	75.18	75.58	75.38	0.2811	0.53%
T_AL_TC_Grab (SHEN)	µg/l	6/6/2007 12:40:00 PM		0	2	0	2	14.45	15.04	14.75	0.4218	4.04%

NPSTORET Precision Analysis

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Project ID: SOURCH2O **Station ID:** SW279 **Station Name:** Paine Run - Left Hand Hollow

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	5/28/2007 5:50:00 PM		0	2	0	2	23.69	23.74	23.71	0.0372	0.22%
Ca_Ions_Grab (SHEN)	µeq/L	5/28/2007 5:50:00 PM		0	2	0	2	25.88	26.25	26.06	0.262	1.42%
Cl_Ions_Grab (SHEN)	µeq/L	5/28/2007 5:50:00 PM		0	2	0	2	25.45	25.51	25.48	0.0402	0.22%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	5/28/2007 5:50:00 PM		0	2	0	2	19.7	20	19.85	0.2121	1.51%
IONRATIO_MET_IC2_GRAB (SHEN)	None	5/28/2007 5:50:00 PM		0	2	0	2	0.933	0.9348	0.9339	0.0013	0.20%
K_Ions_Grab (SHEN)	µeq/L	5/28/2007 5:50:00 PM		0	2	0	2	51.08	51.12	51.1	0.0225	0.06%
Mg_Ions_Grab (SHEN)	µeq/L	5/28/2007 5:50:00 PM		0	2	0	2	57.09	57.22	57.15	0.0924	0.23%
Na_Ions_Grab (SHEN)	µeq/L	5/28/2007 5:50:00 PM		0	2	0	2	27.64	27.69	27.66	0.0324	0.17%
NH4_Ions_Grab (SHEN)	µeq/L	5/28/2007 5:50:00 PM		0	2	2	0	<0.013	<0.013	***	***	***
NO3_Ions_Grab (SHEN)	µeq/L	5/28/2007 5:50:00 PM		0	2	2	0	<0.081	<0.081	***	***	***
pH_Metrohm_Grab (SHEN)	None	5/28/2007 5:50:00 PM		0	2	0	2	5.709	5.896	5.802	0.1317	3.21%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	5/28/2007 5:50:00 PM		0	2	0	2	151.3	151.3	151.3	0.0003	0.00%
SBC_IC2_GRAB (SHEN)	µeq/L	5/28/2007 5:50:00 PM		0	2	0	2	161.8	162.1	162	0.2245	0.20%
SiO2_TC_Grab (SHEN)	µmol/L	5/28/2007 5:50:00 PM		0	2	0	2	115.1	115.3	115.2	0.1389	0.17%
SO4_Ions_Grab (SHEN)	µeq/L	5/28/2007 5:50:00 PM		0	2	0	2	102	102.1	102	0.0033	0.00%
T_AL_TC_Grab (SHEN)	µg/l	5/28/2007 5:50:00 PM		0	2	0	2	8.388	8.978	8.683	0.4168	6.79%

Project ID: SOURCH2O **Station ID:** SW280 **Station Name:** North Fork of Moormans River near 2190 ft elev

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	6/1/2007 11:30:00 AM		0	2	0	2	18.21	18.48	18.34	0.1909	1.47%
ANC_Metrohm_Grab (SHEN)	µeq/L	10/6/2007 4:20:00 PM			2	0	2	42.86	43.32	43.09	0.3254	1.07%
Ca_Ions_Grab (SHEN)	µeq/L	6/1/2007 11:30:00 AM		0	2	0	2	25.37	27.79	26.58	1.712	9.11%

NPSTORET Precision Analysis

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Project ID: SOURCH2O **Station ID:** SW280 **Station Name:** North Fork of Moormans River near 2190 ft elev

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
Ca_Ions_Grab (SHEN)	µeq/L	10/6/2007 4:20:00 PM		0	2	0	2	39.39	39.53	39.46	0.1047	0.38%
Cl_Ions_Grab (SHEN)	µeq/L	6/1/2007 11:30:00 AM		0	2	0	2	19.08	19.3	19.19	0.155	1.14%
Cl_Ions_Grab (SHEN)	µeq/L	10/6/2007 4:20:00 PM		0	2	0	2	22.86	23.38	23.12	0.3685	2.25%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	6/1/2007 11:30:00 AM		0	2	0	2	13.8	14	13.9	0.1414	1.44%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	10/6/2007 4:20:00 PM		0	2	0	2	18.3	18.6	18.45	0.2121	1.63%
IONRATIO_MET_IC2_GRAB (SHEN)	None	6/1/2007 11:30:00 AM		0	2	0	2	0.8494	0.8748	0.8621	0.018	2.95%
IONRATIO_MET_IC2_GRAB (SHEN)	None	10/6/2007 4:20:00 PM		0	2	0	2	0.9424	0.9432	0.9428	0.0006	0.09%
K_Ions_Grab (SHEN)	µeq/L	6/1/2007 11:30:00 AM		0	2	0	2	44.76	44.96	44.86	0.1388	0.44%
K_Ions_Grab (SHEN)	µeq/L	10/6/2007 4:20:00 PM		0	2	0	2	54.69	55.33	55.01	0.4551	1.17%
Mg_Ions_Grab (SHEN)	µeq/L	6/1/2007 11:30:00 AM		0	2	0	2	26.06	26.93	26.49	0.6158	3.29%
Mg_Ions_Grab (SHEN)	µeq/L	10/6/2007 4:20:00 PM		0	2	0	2	41.93	41.97	41.95	0.0287	0.10%
Na_Ions_Grab (SHEN)	µeq/L	6/1/2007 11:30:00 AM		0	2	0	2	18.95	19.07	19.01	0.0883	0.66%
Na_Ions_Grab (SHEN)	µeq/L	10/6/2007 4:20:00 PM		0	2	0	2	22.25	23.09	22.67	0.5978	3.73%
NH4_Ions_Grab (SHEN)	µeq/L	6/1/2007 11:30:00 AM		0	2	2	0	<0.013	<0.013	***	***	***
NH4_Ions_Grab (SHEN)	µeq/L	10/6/2007 4:20:00 PM		0	2	0	2	0.5189	1.074	0.7965	0.3925	69.69%
NO3_Ions_Grab (SHEN)	µeq/L	6/1/2007 11:30:00 AM		0	2	1	1	<0.081	5.71	5.71	***	***
NO3_Ions_Grab (SHEN)	µeq/L	10/6/2007 4:20:00 PM		0	2	0	2	12.7	13.53	13.11	0.5837	6.30%
pH_Metrohm_Grab (SHEN)	None	6/1/2007 11:30:00 AM		0	2	0	2	6.137	6.145	6.141	0.0053	0.12%
pH_Metrohm_Grab (SHEN)	None	10/6/2007 4:20:00 PM			2	0	2	5.699	5.765	5.732	0.0466	1.15%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	6/1/2007 11:30:00 AM		0	2	0	2	97.81	103.9	100.9	4.304	6.03%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	10/6/2007 4:20:00 PM		0	2	0	2	149.8	151.7	150.7	1.388	1.30%
SBC_IC2_GRAB (SHEN)	µeq/L	6/1/2007 11:30:00 AM		0	2	0	2	115.1	118.8	117	2.555	3.09%
SBC_IC2_GRAB (SHEN)	µeq/L	10/6/2007 4:20:00 PM		0	2	0	2	158.9	160.9	159.9	1.369	1.21%
SiO2_TC_Grab (SHEN)	µmol/L	6/1/2007 11:30:00 AM		0	2	0	2	86.92	87.89	87.41	0.6864	1.11%

NPSTORET Precision Analysis

Filtered Results

Project ID: SOURCH2O **Station ID:** SW280 **Station Name:** North Fork of Moormans River near 2190 ft elev

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
SiO2_TC_Grab (SHEN)	µmol/L	10/6/2007 4:20:00 PM		0	2	0	2	112.9	112.9	112.9	0	0.00%
SO4_Ions_Grab (SHEN)	µeq/L	6/1/2007 11:30:00 AM		0	2	0	2	60.26	60.62	60.44	0.2592	0.61%
SO4_Ions_Grab (SHEN)	µeq/L	10/6/2007 4:20:00 PM		0	2	0	2	71.33	71.49	71.41	0.1101	0.22%
T_AL_TC_Grab (SHEN)	µg/l	10/6/2007 4:20:00 PM		0	2	0	2	5.552	5.727	5.64	0.1236	3.10%

Project ID: SOURCH2O **Station ID:** SW2L302 **Station Name:** Hazel River

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	10/19/2007 2:40:00 PM			2	0	2	150.5	150.7	150.6	0.1783	0.17%
Ca_Ions_Grab (SHEN)	µeq/L	10/19/2007 2:40:00 PM		0	2	0	2	76.64	77.52	77.08	0.6248	1.15%
Cl_Ions_Grab (SHEN)	µeq/L	10/19/2007 2:40:00 PM		0	2	0	2	32.48	32.49	32.49	0.0061	0.03%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	10/19/2007 2:40:00 PM		0	2	0	2	20.4	20.5	20.45	0.0707	0.49%
IONRATIO_MET_IC2_GRAB (SHEN)	None	10/19/2007 2:40:00 PM		0	2	0	2	0.9414	0.9446	0.943	0.0023	0.35%
K_Ions_Grab (SHEN)	µeq/L	10/19/2007 2:40:00 PM		0	2	0	2	16.17	16.22	16.19	0.0375	0.33%
Mg_Ions_Grab (SHEN)	µeq/L	10/19/2007 2:40:00 PM		0	2	0	2	46.5	46.81	46.65	0.2183	0.66%
Na_Ions_Grab (SHEN)	µeq/L	10/19/2007 2:40:00 PM		0	2	0	2	79.86	80.09	79.98	0.1603	0.28%
NH4_Ions_Grab (SHEN)	µeq/L	10/19/2007 2:40:00 PM		0	2	2	0	<0.013	<0.013	***	***	***
NO3_Ions_Grab (SHEN)	µeq/L	10/19/2007 2:40:00 PM		0	2	2	0	<0.081	<0.081	***	***	***
pH_Metrohm_Grab (SHEN)	None	10/19/2007 2:40:00 PM			2	0	2	6.936	6.94	6.938	0.0033	0.07%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	10/19/2007 2:40:00 PM		0	2	0	2	207.3	207.4	207.4	0.0998	0.07%
SBC_IC2_GRAB (SHEN)	µeq/L	10/19/2007 2:40:00 PM		0	2	0	2	219.4	220.4	219.9	0.6453	0.42%
SiO2_TC_Grab (SHEN)	µmol/L	10/19/2007 2:40:00 PM		0	2	0	2	196.5	197.3	196.9	0.5498	0.39%
SO4_Ions_Grab (SHEN)	µeq/L	10/19/2007 2:40:00 PM		0	2	0	2	24.19	24.29	24.24	0.0724	0.42%

NPSTORET Precision Analysis

Filtered Results

Project ID: SOURCH2O **Station ID:** SW3F105 **Station Name:** Lower Lewis Run

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	5/24/2007 4:00:00 PM		0	2	0	2	15.9	15.94	15.92	0.0319	0.28%
Ca_Ions_Grab (SHEN)	µeq/L	5/24/2007 4:00:00 PM		0	2	0	2	32	32.35	32.17	0.2464	1.08%
Cl_Ions_Grab (SHEN)	µeq/L	5/24/2007 4:00:00 PM		0	2	0	2	22.87	22.88	22.87	0.0051	0.03%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	5/24/2007 4:00:00 PM		0	2	0	2	19.3	19.5	19.4	0.1414	1.03%
IONRATIO_MET_IC2_GRAB (SHEN)	None	5/24/2007 4:00:00 PM		0	2	0	2	0.9178	0.9213	0.9195	0.0025	0.38%
K_Ions_Grab (SHEN)	µeq/L	5/24/2007 4:00:00 PM		0	2	0	2	47.87	47.87	47.87	0.0046	0.01%
Mg_Ions_Grab (SHEN)	µeq/L	5/24/2007 4:00:00 PM		0	2	0	2	50.1	50.28	50.19	0.1243	0.35%
Na_Ions_Grab (SHEN)	µeq/L	5/24/2007 4:00:00 PM		0	2	0	2	26.15	26.19	26.17	0.0253	0.14%
NH4_Ions_Grab (SHEN)	µeq/L	5/24/2007 4:00:00 PM		0	2	1	1	<0.013	0.2131	0.2131	***	***
NO3_Ions_Grab (SHEN)	µeq/L	5/24/2007 4:00:00 PM		0	2	2	0	<0.081	<0.081	***	***	***
pH_Metrohm_Grab (SHEN)	None	5/24/2007 4:00:00 PM		0	2	0	2	5.632	5.701	5.667	0.0486	1.21%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	5/24/2007 4:00:00 PM		0	2	0	2	143.8	144	143.9	0.1051	0.10%
SBC_IC2_GRAB (SHEN)	µeq/L	5/24/2007 4:00:00 PM		0	2	0	2	156.1	156.9	156.5	0.5375	0.49%
SiO2_TC_Grab (SHEN)	µmol/L	5/24/2007 4:00:00 PM		0	2	0	2	91.6	91.8	91.7	0.1378	0.21%
SO4_Ions_Grab (SHEN)	µeq/L	5/24/2007 4:00:00 PM		0	2	0	2	105	105.2	105.1	0.1421	0.19%
T_AL_TC_Grab (SHEN)	µg/l	5/24/2007 4:00:00 PM		0	2	0	2	12.61	13	12.81	0.2744	3.03%

Project ID: SWAS **Station ID:** PAIN **Station Name:** PAINE RUN at SHEN boundary and UVA gage

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
discharge velocity (SHEN)	ft/sec	6/11/2007 10:30:00 AM			2	0	2	0.52	0.5589	0.5394	0.0275	7.21%
discharge velocity (SHEN)	ft/sec	10/3/2007 10:05:00 AM			2	0	2	0.0552	0.0736	0.0644	0.013	28.57%
discharge velocity (SHEN)	ft/sec	10/16/2007 10:30:00 AM			2	0	2	0.091	0.1024	0.0967	0.0081	11.79%
discharge velocity (SHEN)	ft/sec	11/26/2007 10:25:00 AM			2	0	2	0.4578	0.5656	0.5117	0.0762	21.07%

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Project ID: SWAS **Station ID:** PINE **Station Name:** PINEY RIVER at UVA gage

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
discharge velocity (SHEN)	ft/sec	6/6/2007 2:25:00 PM			2	0	2	3.183	3.566	3.375	0.271	11.35%
discharge velocity (SHEN)	ft/sec	7/17/2007 2:28:00 PM			2	0	2	1.729	2.266	1.998	0.3801	26.90%
discharge velocity (SHEN)	ft/sec	10/30/2007 12:40:00 PM			2	0	2	3.008	3.677	3.343	0.4726	19.99%
discharge velocity (SHEN)	ft/sec	12/27/2007 12:20:00 PM			2	0	2	4.962	6.086	5.524	0.7948	20.35%

Project ID: SWAS **Station ID:** STAN **Station Name:** STAUNTON RIVER at UVA gage

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
discharge velocity (SHEN)	ft/sec	11/12/2007 11:15:00 AM			2	0	2	2.338	2.455	2.396	0.0832	4.91%
discharge velocity (SHEN)	ft/sec	12/3/2007 11:30:00 AM			2	0	2	1.301	1.925	1.613	0.4412	38.69%

Project ID: VTSSS **Station ID:** VT06 **Station Name:** ROWLAND CREEK

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (UVAVTSSS)	µeq/L	1/30/2007 9:33:00 AM		0	2	0	2	39.45	39.69	39.57	0.1655	0.59%
ANC_Metrohm_Grab (UVAVTSSS)	µeq/L	10/29/2007 10:55:00 AM		0	2	0	2	85.4	85.43	85.41	0.0241	0.04%
Ca_Ions_Grab (UVAVTSSS)	µeq/L	1/30/2007 9:33:00 AM		0	2	0	2	38.37	38.63	38.5	0.1889	0.69%
Ca_Ions_Grab (UVAVTSSS)	µeq/L	10/29/2007 10:55:00 AM		0	2	0	2	52.7	54.68	53.69	1.402	3.69%
Cl_Ions_Grab (UVAVTSSS)	µeq/L	1/30/2007 9:33:00 AM		0	2	0	2	11.07	11.09	11.08	0.0109	0.14%
Cl_Ions_Grab (UVAVTSSS)	µeq/L	10/29/2007 10:55:00 AM		0	2	0	2	13.73	13.75	13.74	0.0132	0.14%
Cond_VWR_Manual_Grab (UVAVTSSS)	µS/cm	1/30/2007 9:33:00 AM		0	2	0	2	15.4	15.6	15.5	0.1414	1.29%

NPSTORET Precision Analysis

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Project ID: VTSSS **Station ID:** VT06 **Station Name:** ROWLAND CREEK

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
Cond_VWR_Manual_Grab (UVAVTSSS)	µS/cm	10/29/2007 10:55:00 AM		0	2	0	2	16.9	16.9	16.9	0	0.00%
IONRATIO_MET_IC2_GRAB (UVAVTSSS)	None	1/30/2007 9:33:00 AM		0	2	0	2	0.908	0.956	0.932	0.0339	5.15%
IONRATIO_MET_IC2_GRAB (UVAVTSSS)	None	10/29/2007 10:55:00 AM		0	2	0	2	0.9379	0.9478	0.9428	0.007	1.05%
K_Ions_Grab (UVAVTSSS)	µeq/L	1/30/2007 9:33:00 AM		0	2	0	2	11.96	12.02	11.99	0.0371	0.44%
K_Ions_Grab (UVAVTSSS)	µeq/L	10/29/2007 10:55:00 AM		0	2	0	2	17.82	17.86	17.84	0.0277	0.22%
Mg_Ions_Grab (UVAVTSSS)	µeq/L	1/30/2007 9:33:00 AM		0	2	0	2	48.93	49.29	49.11	0.2555	0.74%
Mg_Ions_Grab (UVAVTSSS)	µeq/L	10/29/2007 10:55:00 AM		0	2	0	2	64.11	64.37	64.24	0.1822	0.40%
Na_Ions_Grab (UVAVTSSS)	µeq/L	1/30/2007 9:33:00 AM		0	2	0	2	26.39	26.43	26.41	0.0342	0.18%
Na_Ions_Grab (UVAVTSSS)	µeq/L	10/29/2007 10:55:00 AM		0	2	0	2	38.33	38.35	38.34	0.0123	0.05%
NH4_Ions_Grab (UVAVTSSS)	µeq/L	1/30/2007 9:33:00 AM			2	2	0	<0.013	<0.013	***	***	***
NH4_Ions_Grab (UVAVTSSS)	µeq/L	10/29/2007 10:55:00 AM		0	2	2	0	<0.013	<0.013	***	***	***
NO3_Ions_Grab (UVAVTSSS)	µeq/L	1/30/2007 9:33:00 AM		0	2	0	2	10.8	14.73	12.76	2.775	30.75%
NO3_Ions_Grab (UVAVTSSS)	µeq/L	10/29/2007 10:55:00 AM		0	2	2	0	<0.081	<0.081	***	***	***
pH_Metrohm_Grab (UVAVTSSS)	None	1/30/2007 9:33:00 AM		0	2	0	2	6.466	6.567	6.517	0.0719	1.56%
pH_Metrohm_Grab (UVAVTSSS)	None	10/29/2007 10:55:00 AM		0	2	0	2	6.64	6.692	6.666	0.0366	0.78%
SAA_MET_IC2_GRAB (UVAVTSSS)	µeq/L	1/30/2007 9:33:00 AM		0	2	0	2	114.1	120.8	117.5	4.759	5.73%
SAA_MET_IC2_GRAB (UVAVTSSS)	µeq/L	10/29/2007 10:55:00 AM		0	2	0	2	164.1	164.2	164.2	0.0353	0.03%

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Project ID: VTSSS **Station ID:** VT06 **Station Name:** ROWLAND CREEK

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
SBC_IC2_GRAB (UVAVTSSS)	µeq/L	1/30/2007 9:33:00 AM		0	2	0	2	125.7	126.4	126	0.5158	0.58%
SBC_IC2_GRAB (UVAVTSSS)	µeq/L	10/29/2007 10:55:00 AM		0	2	0	2	173.2	175	174.1	1.26	1.02%
SiO2_TC_Grab (UVAVTSSS)	µmol/L	1/30/2007 9:33:00 AM		0	2	0	2	84.3	84.69	84.49	0.2814	0.47%
SiO2_TC_Grab (UVAVTSSS)	µmol/L	10/29/2007 10:55:00 AM		0	2	0	2	102.5	102.5	102.5	0	0.00%
SO4_Ions_Grab (UVAVTSSS)	µeq/L	1/30/2007 9:33:00 AM		0	2	0	2	52.51	55.57	54.04	2.16	5.65%
SO4_Ions_Grab (UVAVTSSS)	µeq/L	10/29/2007 10:55:00 AM		0	2	0	2	64.94	65	64.97	0.0462	0.10%

Project ID: VTSSS **Station ID:** VT08 **Station Name:** ROARING FORK-UPPER

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (UVAVTSSS)	µeq/L	1/29/2007 2:20:00 PM		0	2	0	2	13.25	13.34	13.29	0.063	0.67%
Ca_Ions_Grab (UVAVTSSS)	µeq/L	1/29/2007 2:20:00 PM		0	2	0	2	65.59	65.68	65.63	0.063	0.14%
Cl_Ions_Grab (UVAVTSSS)	µeq/L	1/29/2007 2:20:00 PM		0	2	0	2	13.05	13.17	13.11	0.0838	0.90%
Cond_VWR_Manual_Grab (UVAVTSSS)	µS/cm	1/29/2007 2:20:00 PM		0	2	0	2	16	16.1	16.05	0.0707	0.62%
IONRATIO_MET_IC2_GRAB (UVAVTSSS)	None	1/29/2007 2:20:00 PM		0	2	0	2	0.8466	0.8932	0.8699	0.033	5.36%
K_Ions_Grab (UVAVTSSS)	µeq/L	1/29/2007 2:20:00 PM		0	2	0	2	6.529	6.562	6.546	0.0232	0.50%
Mg_Ions_Grab (UVAVTSSS)	µeq/L	1/29/2007 2:20:00 PM		0	2	0	2	30.37	30.42	30.4	0.0342	0.16%
Na_Ions_Grab (UVAVTSSS)	µeq/L	1/29/2007 2:20:00 PM		0	2	0	2	16.27	16.35	16.31	0.0603	0.52%

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Project ID: VTSSS **Station ID:** VT08 **Station Name:** ROARING FORK-UPPER

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
NH4_Ions_Grab (UVAVTSSS)	µeq/L	1/29/2007 2:20:00 PM			2	2	0	<0.013	<0.013	***	***	***
NO3_Ions_Grab (UVAVTSSS)	µeq/L	1/29/2007 2:20:00 PM		0	2	0	2	4.233	9.964	7.098	4.052	80.74%
pH_Metrohm_Grab (UVAVTSSS)	None	1/29/2007 2:20:00 PM		0	2	0	2	6.06	6.072	6.066	0.0079	0.18%
SAA_MET_IC2_GRAB (UVAVTSSS)	µeq/L	1/29/2007 2:20:00 PM		0	2	0	2	100.6	106.2	103.4	3.968	5.43%
SBC_IC2_GRAB (UVAVTSSS)	µeq/L	1/29/2007 2:20:00 PM		0	2	0	2	118.9	118.9	118.9	0.0548	0.07%
SiO2_TC_Grab (UVAVTSSS)	µmol/L	1/29/2007 2:20:00 PM		0	2	0	2	58.56	58.75	58.66	0.1287	0.31%
SO4_Ions_Grab (UVAVTSSS)	µeq/L	1/29/2007 2:20:00 PM		0	2	0	2	69.76	70.09	69.93	0.2311	0.47%

Project ID: VTSSS **Station ID:** VT18 **Station Name:** BEARWALLOW RUN

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (UVAVTSSS)	µeq/L	7/30/2007 1:00:00 PM		0	2	0	2	132.7	132.8	132.7	0.1024	0.11%
Ca_Ions_Grab (UVAVTSSS)	µeq/L	7/30/2007 1:00:00 PM		0	2	0	2	89.2	90.6	89.9	0.9909	1.56%
Cl_Ions_Grab (UVAVTSSS)	µeq/L	7/30/2007 1:00:00 PM		0	2	0	2	8.88	8.931	8.905	0.036	0.57%
Cond_VWR_Manual_Grab (UVAVTSSS)	µS/cm	7/30/2007 1:00:00 PM		0	2	0	2	20.9	21.1	21	0.1414	0.95%
IONRATIO_MET_IC2_GRAB (UVAVTSSS)	None	7/30/2007 1:00:00 PM		0	2	0	2	0.9012	0.918	0.9096	0.0119	1.85%
K_Ions_Grab (UVAVTSSS)	µeq/L	7/30/2007 1:00:00 PM		0	2	0	2	21.22	21.42	21.32	0.1398	0.93%
Mg_Ions_Grab (UVAVTSSS)	µeq/L	7/30/2007 1:00:00 PM		0	2	0	2	73.63	73.81	73.72	0.1246	0.24%

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Project ID: VTSSS **Station ID:** VT18 **Station Name:** BEARWALLOW RUN

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
Na_Ions_Grab (UVAVTSSS)	µeq/L	7/30/2007 1:00:00 PM		0	2	0	2	44.34	44.77	44.56	0.3015	0.96%
NH4_Ions_Grab (UVAVTSSS)	µeq/L	7/30/2007 1:00:00 PM		0	2	0	2	0.3535	0.5631	0.4583	0.1482	45.75%
NO3_Ions_Grab (UVAVTSSS)	µeq/L	7/30/2007 1:00:00 PM		0	2	0	2	9.056	10.49	9.773	1.014	14.67%
pH_Metrohm_Grab (UVAVTSSS)	None	7/30/2007 1:00:00 PM		0	2	0	2	6.977	7.013	6.995	0.0252	0.51%
SAA_MET_IC2_GRAB (UVAVTSSS)	µeq/L	7/30/2007 1:00:00 PM		0	2	0	2	208.3	210	209.2	1.178	0.80%
SBC_IC2_GRAB (UVAVTSSS)	µeq/L	7/30/2007 1:00:00 PM		0	2	0	2	228.7	231.2	230	1.705	1.05%
SiO2_TC_Grab (UVAVTSSS)	µmol/L	7/30/2007 1:00:00 PM		0	2	0	2	87.69	88.27	87.98	0.4069	0.65%
SO4_Ions_Grab (UVAVTSSS)	µeq/L	7/30/2007 1:00:00 PM		0	2	0	2	57.59	57.92	57.75	0.2309	0.57%

Project ID: VTSSS **Station ID:** VT29 **Station Name:** WAR SPUR BRANCH

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (UVAVTSSS)	µeq/L	4/30/2007 9:00:00 AM		0	2	0	2	-0.25825	-0.06613	-0.16219	0.1358	118.45%
Ca_Ions_Grab (UVAVTSSS)	µeq/L	4/30/2007 9:00:00 AM		0	2	0	2	20.04	20.41	20.23	0.2624	1.83%
Cl_Ions_Grab (UVAVTSSS)	µeq/L	4/30/2007 9:00:00 AM		0	2	0	2	13.91	13.95	13.93	0.031	0.31%
Cond_VWR_Manual_Grab (UVAVTSSS)	µS/cm	4/30/2007 9:00:00 AM		0	2	0	2	9.9	10	9.95	0.0707	1.01%
IONRATIO_MET_IC2_GRAB (UVAVTSSS)	None	4/30/2007 9:00:00 AM		0	2	0	2	0.9055	0.9092	0.9073	0.0027	0.42%
K_Ions_Grab (UVAVTSSS)	µeq/L	4/30/2007 9:00:00 AM		0	2	0	2	7.591	7.61	7.6	0.0132	0.25%

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Project ID: VTSSS **Station ID:** VT29 **Station Name:** WAR SPUR BRANCH

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
Mg_Ions_Grab (UVAVTSSS)	µeq/L	4/30/2007 9:00:00 AM		0	2	0	2	21.51	21.57	21.54	0.0411	0.27%
Na_Ions_Grab (UVAVTSSS)	µeq/L	4/30/2007 9:00:00 AM		0	2	0	2	9.826	9.852	9.839	0.0186	0.27%
NH4_Ions_Grab (UVAVTSSS)	µeq/L	4/30/2007 9:00:00 AM		0	2	2	0	<0.013	<0.013	***	***	***
NO3_Ions_Grab (UVAVTSSS)	µeq/L	4/30/2007 9:00:00 AM		0	2	2	0	<0.081	<0.081	***	***	***
pH_Metrohm_Grab (UVAVTSSS)	None	4/30/2007 9:00:00 AM		0	2	0	2	5.475	5.488	5.481	0.0093	0.24%
SAA_MET_IC2_GRAB (UVAVTSSS)	µeq/L	4/30/2007 9:00:00 AM		0	2	0	2	53.49	53.96	53.73	0.3295	0.87%
SBC_IC2_GRAB (UVAVTSSS)	µeq/L	4/30/2007 9:00:00 AM		0	2	0	2	59.08	59.35	59.21	0.1894	0.45%
SiO2_TC_Grab (UVAVTSSS)	µmol/L	4/30/2007 9:00:00 AM		0	2	0	2	49.52	49.65	49.58	0.0874	0.25%
SO4_Ions_Grab (UVAVTSSS)	µeq/L	4/30/2007 9:00:00 AM		0	2	0	2	39.76	40.08	39.92	0.2246	0.80%
T_AL_TC_Grab (UVAVTSSS)	µg/l	4/30/2007 9:00:00 AM		0	2	0	2	15.86	15.94	15.9	0.0537	0.48%

Project ID: VTSSS **Station ID:** VT32 **Station Name:** LAUREL BRANCH OF STONY CREEK

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (UVAVTSSS)	µeq/L	1/26/2007 1:15:00 PM		0	2	0	2	2.562	2.852	2.707	0.2047	10.70%
Ca_Ions_Grab (UVAVTSSS)	µeq/L	1/26/2007 1:15:00 PM		0	2	0	2	58.64	58.76	58.7	0.0836	0.20%
Cl_Ions_Grab (UVAVTSSS)	µeq/L	1/26/2007 1:15:00 PM		0	2	0	2	17.55	18.06	17.8	0.3598	2.86%
Cond_VWR_Manual_Grab (UVAVTSSS)	µS/cm	1/26/2007 1:15:00 PM		0	2	0	2	16.9	17.3	17.1	0.2828	2.34%

NPSTORET Precision Analysis

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Project ID: VTSSS **Station ID:** VT32 **Station Name:** LAUREL BRANCH OF STONY CREEK

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
IONRATIO_MET_IC2_GRAB (UVAVTSSS)	None	1/26/2007 1:15:00 PM		480	2	0	2	0.8693	0.9475	0.9084	0.0553	8.61%
K_Ions_Grab (UVAVTSSS)	µeq/L	1/26/2007 1:15:00 PM		0	2	0	2	6.439	6.452	6.446	0.0096	0.21%
Mg_Ions_Grab (UVAVTSSS)	µeq/L	1/26/2007 1:15:00 PM		0	2	0	2	37.29	37.35	37.32	0.0451	0.17%
Na_Ions_Grab (UVAVTSSS)	µeq/L	1/26/2007 1:15:00 PM		0	2	0	2	10.41	10.48	10.45	0.0563	0.76%
NH4_Ions_Grab (UVAVTSSS)	µeq/L	1/26/2007 1:15:00 PM		0	2	1	1	<0.013	0.2217	0.2217	***	***
NO3_Ions_Grab (UVAVTSSS)	µeq/L	1/26/2007 1:15:00 PM		0	2	0	2	0.8717	9.546	5.209	6.133	166.52%
pH_Metrohm_Grab (UVAVTSSS)	None	1/26/2007 1:15:00 PM		0	2	0	2	5.572	5.589	5.581	0.0122	0.31%
SAA_MET_IC2_GRAB (UVAVTSSS)	µeq/L	1/26/2007 1:15:00 PM		480	2	0	2	98.24	107.1	102.7	6.27	8.63%
SBC_IC2_GRAB (UVAVTSSS)	µeq/L	1/26/2007 1:15:00 PM		1008	2	0	2	113	113	113	0.0232	0.03%
SiO2_TC_Grab (UVAVTSSS)	µmol/L	1/26/2007 1:15:00 PM		0	2	0	2	51.49	51.86	51.68	0.2581	0.71%
SO4_Ions_Grab (UVAVTSSS)	µeq/L	1/26/2007 1:15:00 PM		0	2	0	2	76.75	77.16	76.96	0.2913	0.54%
T_AL_TC_Grab (UVAVTSSS)	µg/l	1/26/2007 1:15:00 PM		0	2	0	2	26.58	27.07	26.82	0.3472	1.83%

Project ID: VTSSS **Station ID:** VT33 **Station Name:** GUYS RUN

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (UVAVTSSS)	µeq/L	1/27/2007 1:08:00 PM		0	2	0	2	325.4	325.6	325.5	0.1602	0.07%
Ca_Ions_Grab (UVAVTSSS)	µeq/L	1/27/2007 1:08:00 PM		0	2	0	2	300.3	304.2	302.2	2.762	1.29%

NPSTORET Precision Analysis

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Project ID: VTSSS **Station ID:** VT33 **Station Name:** GUYS RUN

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
Cl_Ions_Grab (UVAVTSSS)	µeq/L	1/27/2007 1:08:00 PM		0	2	0	2	16.21	16.5	16.36	0.208	1.80%
Cond_VWR_Manual_Grab (UVAVTSSS)	µS/cm	1/27/2007 1:08:00 PM		0	2	0	2	41.1	41.1	41.1	0	0.00%
IONRATIO_MET_IC2_GRAB (UVAVTSSS)	None	1/27/2007 1:08:00 PM		0	2	0	2	1.003	1.015	1.009	0.0087	1.22%
K_Ions_Grab (UVAVTSSS)	µeq/L	1/27/2007 1:08:00 PM		0	2	0	2	10.51	10.6	10.56	0.0593	0.79%
Mg_Ions_Grab (UVAVTSSS)	µeq/L	1/27/2007 1:08:00 PM		0	2	0	2	63.97	64.01	63.99	0.0259	0.06%
Na_Ions_Grab (UVAVTSSS)	µeq/L	1/27/2007 1:08:00 PM		0	2	0	2	18.65	18.89	18.77	0.1702	1.28%
NH4_Ions_Grab (UVAVTSSS)	µeq/L	1/27/2007 1:08:00 PM			2	2	0	<0.013	<0.013	***	***	***
NO3_Ions_Grab (UVAVTSSS)	µeq/L	1/27/2007 1:08:00 PM		0	2	1	1	<0.081	0.8944	0.8944	***	***
pH_Metrohm_Grab (UVAVTSSS)	None	1/27/2007 1:08:00 PM		0	2	0	2	7.271	7.303	7.287	0.0227	0.44%
SAA_MET_IC2_GRAB (UVAVTSSS)	µeq/L	1/27/2007 1:08:00 PM		0	2	0	2	398.4	399.8	399.1	0.9201	0.33%
SBC_IC2_GRAB (UVAVTSSS)	µeq/L	1/27/2007 1:08:00 PM		0	2	0	2	393.8	397.3	395.6	2.506	0.90%
SiO2_TC_Grab (UVAVTSSS)	µmol/L	1/27/2007 1:08:00 PM		0	2	0	2	86.75	86.93	86.84	0.1287	0.21%
SO4_Ions_Grab (UVAVTSSS)	µeq/L	1/27/2007 1:08:00 PM		0	2	0	2	56.78	56.85	56.81	0.052	0.13%

Project ID: VTSSS **Station ID:** VT37 **Station Name:** NORTH RIVER

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (UVAVTSSS)	µeq/L	10/30/2007 2:05:00 PM		0	2	0	2	31.69	31.7	31.7	0.0082	0.04%

NPSTORET Precision Analysis

Filtered Results

Project ID: VTSSS **Station ID:** VT37 **Station Name:** NORTH RIVER

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
Ca_Ions_Grab (UVAVTSSS)	µeq/L	10/30/2007 2:05:00 PM		0	2	0	2	46.32	46.79	46.56	0.332	1.01%
Cl_Ions_Grab (UVAVTSSS)	µeq/L	10/30/2007 2:05:00 PM		0	2	0	2	18.69	18.76	18.73	0.0463	0.35%
Cond_VWR_Manual_Grab (UVAVTSSS)	µS/cm	10/30/2007 2:05:00 PM		0	2	0	2	17.2	17.5	17.35	0.2121	1.73%
IONRATIO_MET_IC2_GRAB (UVAVTSSS)	None	10/30/2007 2:05:00 PM		0	2	0	2	0.9715	0.9759	0.9737	0.0031	0.44%
K_Ions_Grab (UVAVTSSS)	µeq/L	10/30/2007 2:05:00 PM		0	2	0	2	19.33	19.37	19.35	0.0257	0.19%
Mg_Ions_Grab (UVAVTSSS)	µeq/L	10/30/2007 2:05:00 PM		0	2	0	2	60.04	60.19	60.11	0.1042	0.25%
Na_Ions_Grab (UVAVTSSS)	µeq/L	10/30/2007 2:05:00 PM		0	2	0	2	25.97	25.99	25.98	0.0087	0.05%
NH4_Ions_Grab (UVAVTSSS)	µeq/L	10/30/2007 2:05:00 PM		0	2	2	0	<0.013	<0.013	***	***	***
NO3_Ions_Grab (UVAVTSSS)	µeq/L	10/30/2007 2:05:00 PM		0	2	0	2	26.52	27.52	27.02	0.7069	3.70%
pH_Metrohm_Grab (UVAVTSSS)	None	10/30/2007 2:05:00 PM		0	2	0	2	6.268	6.293	6.281	0.0175	0.39%
SAA_MET_IC2_GRAB (UVAVTSSS)	µeq/L	10/30/2007 2:05:00 PM		0	2	0	2	147.4	148.7	148	0.9056	0.87%
SBC_IC2_GRAB (UVAVTSSS)	µeq/L	10/30/2007 2:05:00 PM		0	2	0	2	151.7	152.3	152	0.4532	0.42%
SiO2_TC_Grab (UVAVTSSS)	µmol/L	10/30/2007 2:05:00 PM		0	2	0	2	84.18	84.18	84.18	0	0.00%
SO4_Ions_Grab (UVAVTSSS)	µeq/L	10/30/2007 2:05:00 PM		0	2	0	2	70.47	70.67	70.57	0.1442	0.29%

NPSTORET Precision Analysis

Filtered Results

Project ID: VTSSS **Station ID:** VT44 **Station Name:** GEORGES CREEK

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (UVAVTSSS)	µeq/L	7/25/2007 4:30:00 PM		0	2	0	2	87.79	92.26	90.02	3.16	4.96%
Ca_Ions_Grab (UVAVTSSS)	µeq/L	7/25/2007 4:30:00 PM		0	2	0	2	66.03	67.93	66.98	1.339	2.83%
Cl_Ions_Grab (UVAVTSSS)	µeq/L	7/25/2007 4:30:00 PM		0	2	0	2	20.67	22.18	21.43	1.072	7.08%
Cond_VWR_Manual_Grab (UVAVTSSS)	µS/cm	7/25/2007 4:30:00 PM		0	2	0	2	15.8	16.2	16	0.2828	2.50%
IONRATIO_MET_IC2_GRAB (UVAVTSSS)	None	7/25/2007 4:30:00 PM		0	2	0	2	0.905	0.938	0.9215	0.0233	3.57%
K_Ions_Grab (UVAVTSSS)	µeq/L	7/25/2007 4:30:00 PM		0	2	0	2	9.423	10.16	9.794	0.5243	7.57%
Mg_Ions_Grab (UVAVTSSS)	µeq/L	7/25/2007 4:30:00 PM		0	2	0	2	24.41	24.68	24.55	0.187	1.08%
Na_Ions_Grab (UVAVTSSS)	µeq/L	7/25/2007 4:30:00 PM		0	2	0	2	60.65	62.09	61.37	1.02	2.35%
NH4_Ions_Grab (UVAVTSSS)	µeq/L	7/25/2007 4:30:00 PM		0	2	0	2	0.34	0.4957	0.4178	0.1101	37.25%
NO3_Ions_Grab (UVAVTSSS)	µeq/L	7/25/2007 4:30:00 PM		0	2	0	2	5.461	8.378	6.92	2.063	42.16%
pH_Metrohm_Grab (UVAVTSSS)	None	7/25/2007 4:30:00 PM		0	2	0	2	6.426	6.678	6.552	0.178	3.84%
SAA_MET_IC2_GRAB (UVAVTSSS)	µeq/L	7/25/2007 4:30:00 PM		0	2	0	2	145.7	155	150.3	6.524	6.14%
SBC_IC2_GRAB (UVAVTSSS)	µeq/L	7/25/2007 4:30:00 PM		0	2	0	2	161	165.2	163.1	2.96	2.57%
SiO2_TC_Grab (UVAVTSSS)	µmol/L	7/25/2007 4:30:00 PM		0	2	0	2	145.7	146.3	146	0.4168	0.40%
SO4_Ions_Grab (UVAVTSSS)	µeq/L	7/25/2007 4:30:00 PM		0	2	0	2	31.81	32.13	31.97	0.2285	1.01%

NPSTORET Precision Analysis

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Project ID: VTSSS **Station ID:** VT46 **Station Name:** LITTLE COVE CREEK

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (UVAVTSSS)	µeq/L	5/2/2007 10:20:00 AM		0	2	0	2	80.86	82.84	81.85	1.4	2.42%
Ca_Ions_Grab (UVAVTSSS)	µeq/L	5/2/2007 10:20:00 AM		0	2	0	2	65.59	65.98	65.78	0.2782	0.60%
Cl_Ions_Grab (UVAVTSSS)	µeq/L	5/2/2007 10:20:00 AM		0	2	0	2	22.13	22.19	22.16	0.0378	0.24%
Cond_VWR_Manual_Grab (UVAVTSSS)	µS/cm	5/2/2007 10:20:00 AM		0	2	0	2	14.5	14.5	14.5	0	0.00%
IONRATIO_MET_IC2_GRAB (UVAVTSSS)	None	5/2/2007 10:20:00 AM		0	2	0	2	0.9225	0.94	0.9312	0.0124	1.88%
K_Ions_Grab (UVAVTSSS)	µeq/L	5/2/2007 10:20:00 AM		0	2	0	2	4.884	4.969	4.927	0.0605	1.74%
Mg_Ions_Grab (UVAVTSSS)	µeq/L	5/2/2007 10:20:00 AM		0	2	0	2	20.75	20.8	20.78	0.0347	0.24%
Na_Ions_Grab (UVAVTSSS)	µeq/L	5/2/2007 10:20:00 AM		0	2	0	2	60.33	60.36	60.34	0.0191	0.04%
NH4_Ions_Grab (UVAVTSSS)	µeq/L	5/2/2007 10:20:00 AM		0	2	1	1	<0.013	0.7577	0.7577	***	***
NO3_Ions_Grab (UVAVTSSS)	µeq/L	5/2/2007 10:20:00 AM		0	2	2	0	<0.081	<0.081	***	***	***
pH_Metrohm_Grab (UVAVTSSS)	None	5/2/2007 10:20:00 AM		0	2	0	2	6.575	6.779	6.677	0.1442	3.06%
SAA_MET_IC2_GRAB (UVAVTSSS)	µeq/L	5/2/2007 10:20:00 AM		0	2	0	2	140.6	142.9	141.7	1.58	1.58%
SBC_IC2_GRAB (UVAVTSSS)	µeq/L	5/2/2007 10:20:00 AM		0	2	0	2	152	152.4	152.2	0.3289	0.31%
SiO2_TC_Grab (UVAVTSSS)	µmol/L	5/2/2007 10:20:00 AM		0	2	0	2	129.4	130	129.7	0.4191	0.46%
SO4_Ions_Grab (UVAVTSSS)	µeq/L	5/2/2007 10:20:00 AM		0	2	0	2	37.54	37.85	37.7	0.2178	0.82%

NPSTORET Precision Analysis

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Project ID: VTSSS **Station ID:** VT53 **Station Name:** TWO MILE RUN

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	7/30/2007 10:10:00 AM		0	2	0	2	32.55	32.8	32.68	0.1792	0.78%
Ca_Ions_Grab (SHEN)	µeq/L	7/30/2007 10:10:00 AM		0	2	0	2	24.41	25.48	24.95	0.7552	4.28%
Cl_Ions_Grab (SHEN)	µeq/L	7/30/2007 10:10:00 AM		0	2	0	2	20.83	20.87	20.85	0.028	0.19%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	7/30/2007 10:10:00 AM		0	2	0	2	14.4	14.7	14.55	0.2121	2.06%
IONRATIO_MET_IC2_GRAB (SHEN)	None	7/30/2007 10:10:00 AM		0	2	0	2	0.8956	0.9029	0.8992	0.0052	0.82%
K_Ions_Grab (SHEN)	µeq/L	7/30/2007 10:10:00 AM		0	2	0	2	37.73	37.76	37.75	0.0226	0.08%
Mg_Ions_Grab (SHEN)	µeq/L	7/30/2007 10:10:00 AM		0	2	0	2	39.69	39.71	39.7	0.0152	0.05%
Na_Ions_Grab (SHEN)	µeq/L	7/30/2007 10:10:00 AM		0	2	0	2	27.5	27.55	27.53	0.0355	0.18%
NH4_Ions_Grab (SHEN)	µeq/L	7/30/2007 10:10:00 AM		0	2	0	2	0.7274	0.7665	0.7469	0.0277	5.24%
NO3_Ions_Grab (SHEN)	µeq/L	7/30/2007 10:10:00 AM		0	2	0	2	1.516	1.921	1.718	0.2861	23.55%
pH_Metrohm_Grab (SHEN)	None	7/30/2007 10:10:00 AM		0	2	0	2	6.193	6.209	6.201	0.0107	0.25%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	7/30/2007 10:10:00 AM		0	2	0	2	117.5	117.5	117.5	0.0404	0.05%
SBC_IC2_GRAB (SHEN)	µeq/L	7/30/2007 10:10:00 AM		0	2	0	2	130.2	131.2	130.7	0.7096	0.77%
SiO2_TC_Grab (SHEN)	µmol/L	7/30/2007 10:10:00 AM		0	2	0	2	124.8	126.1	125.4	0.9662	1.09%
SO4_Ions_Grab (SHEN)	µeq/L	7/30/2007 10:10:00 AM		0	2	0	2	62.23	62.28	62.26	0.0385	0.09%

Project ID: VTSSS **Station ID:** VT57 **Station Name:** BLACK RUN-LOWER

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (UVAVTSSS)	µeq/L	4/25/2007 2:10:00 PM		0	2	0	2	19.14	19.44	19.29	0.2125	1.56%
Ca_Ions_Grab (UVAVTSSS)	µeq/L	4/25/2007 2:10:00 PM		0	2	0	2	49.5	50.15	49.82	0.4549	1.29%
Cl_Ions_Grab (UVAVTSSS)	µeq/L	4/25/2007 2:10:00 PM		0	2	0	2	14.68	14.69	14.68	0.0101	0.10%

NPSTORET Precision Analysis

Filtered Results

Project ID: VTSSS **Station ID:** VT57 **Station Name:** BLACK RUN-LOWER

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
Cond_VWR_Manual_Grab (UVAVTSSS)	µS/cm	4/25/2007 2:10:00 PM		0	2	0	2	20.1	20.2	20.15	0.0707	0.50%
IONRATIO_MET_IC2_GRAB (UVAVTSSS)	None	4/25/2007 2:10:00 PM		0	2	0	2	0.9465	0.9511	0.9488	0.0033	0.49%
K_Ions_Grab (UVAVTSSS)	µeq/L	4/25/2007 2:10:00 PM		0	2	0	2	20.35	20.38	20.36	0.0212	0.15%
Mg_Ions_Grab (UVAVTSSS)	µeq/L	4/25/2007 2:10:00 PM		0	2	0	2	63.04	63.06	63.05	0.0176	0.04%
Na_Ions_Grab (UVAVTSSS)	µeq/L	4/25/2007 2:10:00 PM		0	2	0	2	23.55	23.59	23.57	0.0264	0.16%
NH4_Ions_Grab (UVAVTSSS)	µeq/L	4/25/2007 2:10:00 PM		0	2	2	0	<0.013	<0.013	***	***	***
NO3_Ions_Grab (UVAVTSSS)	µeq/L	4/25/2007 2:10:00 PM		0	2	0	2	10.48	11.04	10.76	0.3944	5.18%
pH_Metrohm_Grab (UVAVTSSS)	None	4/25/2007 2:10:00 PM		0	2	0	2	6.296	6.301	6.298	0.0033	0.07%
SAA_MET_IC2_GRAB (UVAVTSSS)	µeq/L	4/25/2007 2:10:00 PM		0	2	0	2	148.7	148.9	148.8	0.1136	0.11%
SBC_IC2_GRAB (UVAVTSSS)	µeq/L	4/25/2007 2:10:00 PM		0	2	0	2	156.5	157.1	156.8	0.4249	0.38%
SiO2_TC_Grab (UVAVTSSS)	µmol/L	4/25/2007 2:10:00 PM		0	2	0	2	78.07	78.46	78.27	0.2746	0.50%
SO4_Ions_Grab (UVAVTSSS)	µeq/L	4/25/2007 2:10:00 PM		0	2	0	2	104	104.1	104	0.0783	0.11%

Project ID: VTSSS **Station ID:** VT61 **Station Name:** NORTH FORK THORNTON RIVER

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	1/29/2007 1:30:00 PM		0	2	0	2	237	237.7	237.3	0.4405	0.26%
Ca_Ions_Grab (SHEN)	µeq/L	1/29/2007 1:30:00 PM		0	2	0	2	143.3	144.1	143.7	0.5397	0.53%

NPSTORET Precision Analysis

Filtered Results

Project ID: VTSSS **Station ID:** VT61 **Station Name:** NORTH FORK THORNTON RIVER

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
Cl_Ions_Grab (SHEN)	µeq/L	1/29/2007 1:30:00 PM		0	2	0	2	31.47	31.5	31.48	0.021	0.09%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	1/29/2007 1:30:00 PM		0	2	0	2	38.8	39.4	39.1	0.4243	1.53%
IONRATIO_MET_IC2_GRAB (SHEN)	None	1/29/2007 1:30:00 PM		0	2	0	2	0.9425	0.9544	0.9484	0.0084	1.25%
K_Ions_Grab (SHEN)	µeq/L	1/29/2007 1:30:00 PM		0	2	0	2	7.008	7.045	7.026	0.0265	0.53%
Mg_Ions_Grab (SHEN)	µeq/L	1/29/2007 1:30:00 PM		0	2	0	2	133.5	133.7	133.6	0.1406	0.15%
Na_Ions_Grab (SHEN)	µeq/L	1/29/2007 1:30:00 PM		0	2	0	2	92.22	92.45	92.34	0.1564	0.24%
NH4_Ions_Grab (SHEN)	µeq/L	1/29/2007 1:30:00 PM		0	2	2	0	<0.013	<0.013	***	***	***
NO3_Ions_Grab (SHEN)	µeq/L	1/29/2007 1:30:00 PM		0	2	0	2	8.302	11.45	9.878	2.229	31.91%
pH_Metrohm_Grab (SHEN)	None	1/29/2007 1:30:00 PM		0	2	0	2	7.146	7.276	7.211	0.0919	1.80%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	1/29/2007 1:30:00 PM		0	2	0	2	355.6	358.9	357.2	2.388	0.95%
SBC_IC2_GRAB (SHEN)	µeq/L	1/29/2007 1:30:00 PM		0	2	0	2	376.1	377.2	376.7	0.8103	0.30%
SiO2_TC_Grab (SHEN)	µmol/L	1/29/2007 1:30:00 PM		0	2	0	2	231.2	234.2	232.7	2.16	1.31%
SO4_Ions_Grab (SHEN)	µeq/L	1/29/2007 1:30:00 PM		0	2	0	2	78.35	78.72	78.54	0.2604	0.47%

Project ID: VTSSS **Station ID:** VT63 **Station Name:** SHOE CREEK

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (UVAVTSSS)	µeq/L	10/29/2007 3:45:00 PM		0	2	0	2	102.7	106.9	104.8	2.992	4.04%
Ca_Ions_Grab (UVAVTSSS)	µeq/L	10/29/2007 3:45:00 PM		24	2	0	2	68.06	68.78	68.42	0.5063	1.05%
Cl_Ions_Grab (UVAVTSSS)	µeq/L	10/29/2007 3:45:00 PM		24	2	0	2	27.7	27.95	27.83	0.1736	0.88%
Cond_VWR_Manual_Grab (UVAVTSSS)	µS/cm	10/29/2007 3:45:00 PM		0	2	0	2	17	17.3	17.15	0.2121	1.75%
IONRATIO_MET_IC2_GRAB (UVAVTSSS)	None	10/29/2007 3:45:00 PM		0	2	0	2	0.9127	0.9421	0.9274	0.0208	3.17%

NPSTORET Precision Analysis

Filtered Results

Project ID: VTSSS **Station ID:** VT63 **Station Name:** SHOE CREEK

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
K_Ions_Grab (UVAVTSSS)	µeq/L	10/29/2007 3:45:00 PM		24	2	0	2	13.07	13.3	13.18	0.1611	1.73%
Mg_Ions_Grab (UVAVTSSS)	µeq/L	10/29/2007 3:45:00 PM		24	2	0	2	27.91	28.28	28.1	0.2611	1.31%
Na_Ions_Grab (UVAVTSSS)	µeq/L	10/29/2007 3:45:00 PM		24	2	0	2	65.63	65.65	65.64	0.0159	0.03%
NH4_Ions_Grab (UVAVTSSS)	µeq/L	10/29/2007 3:45:00 PM		24	2	2	0	<0.013	<0.013	***	***	***
NO3_Ions_Grab (UVAVTSSS)	µeq/L	10/29/2007 3:45:00 PM		24	2	1	1	<0.081	0.5216	0.5216	***	***
pH_Metrohm_Grab (UVAVTSSS)	None	10/29/2007 3:45:00 PM		0	2	0	2	6.128	6.36	6.244	0.1637	3.71%
SAA_MET_IC2_GRAB (UVAVTSSS)	µeq/L	10/29/2007 3:45:00 PM		0	2	0	2	160.6	164.6	162.6	2.797	2.43%
SBC_IC2_GRAB (UVAVTSSS)	µeq/L	10/29/2007 3:45:00 PM		0	2	0	2	174.7	176	175.3	0.9126	0.74%
SiO2_TC_Grab (UVAVTSSS)	µmol/L	10/29/2007 3:45:00 PM		0	2	0	2	147.9	148.3	148.1	0.2812	0.27%
SO4_Ions_Grab (UVAVTSSS)	µeq/L	10/29/2007 3:45:00 PM		24	2	0	2	29.47	29.98	29.73	0.3614	1.72%

Project ID: VTSSS **Station ID:** VT65 **Station Name:** MEADOW CREEK

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (UVAVTSSS)	µeq/L	5/3/2007 8:55:00 AM		0	2	0	2	65.14	66.27	65.7	0.8039	1.73%
Ca_Ions_Grab (UVAVTSSS)	µeq/L	5/3/2007 8:55:00 AM		0	2	0	2	48.14	48.33	48.23	0.1391	0.41%
Cl_Ions_Grab (UVAVTSSS)	µeq/L	5/3/2007 8:55:00 AM		0	2	0	2	17.35	17.75	17.55	0.283	2.28%
Cond_VWR_Manual_Grab (UVAVTSSS)	µS/cm	5/3/2007 8:55:00 AM		0	2	0	2	11.6	11.6	11.6	0	0.00%

NPSTORET Precision Analysis

Filtered Results

Project ID: VTSSS **Station ID:** VT65 **Station Name:** MEADOW CREEK

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
IONRATIO_MET_IC2_GRAB (UVAVTSSS)	None	5/3/2007 8:55:00 AM		0	2	0	2	0.9131	0.9181	0.9156	0.0036	0.55%
K_Ions_Grab (UVAVTSSS)	µeq/L	5/3/2007 8:55:00 AM		0	2	0	2	6.667	6.669	6.668	0.0019	0.04%
Mg_Ions_Grab (UVAVTSSS)	µeq/L	5/3/2007 8:55:00 AM		0	2	0	2	15.09	15.17	15.13	0.0567	0.53%
Na_Ions_Grab (UVAVTSSS)	µeq/L	5/3/2007 8:55:00 AM		0	2	0	2	46.53	46.71	46.62	0.1242	0.38%
NH4_Ions_Grab (UVAVTSSS)	µeq/L	5/3/2007 8:55:00 AM		0	2	2	0	<0.013	<0.013	***	***	***
NO3_Ions_Grab (UVAVTSSS)	µeq/L	5/3/2007 8:55:00 AM		0	2	2	0	<0.081	<0.081	***	***	***
pH_Metrohm_Grab (UVAVTSSS)	None	5/3/2007 8:55:00 AM		0	2	0	2	6.479	6.493	6.486	0.0099	0.22%
SAA_MET_IC2_GRAB (UVAVTSSS)	µeq/L	5/3/2007 8:55:00 AM		0	2	0	2	106.5	107.1	106.8	0.4558	0.60%
SBC_IC2_GRAB (UVAVTSSS)	µeq/L	5/3/2007 8:55:00 AM		0	2	0	2	116.6	116.7	116.7	0.0436	0.05%
SiO2_TC_Grab (UVAVTSSS)	µmol/L	5/3/2007 8:55:00 AM		0	2	0	2	112	112.4	112.2	0.2777	0.35%
SO4_Ions_Grab (UVAVTSSS)	µeq/L	5/3/2007 8:55:00 AM		0	2	0	2	23.47	23.57	23.52	0.0651	0.39%

Project ID: VTSSS **Station ID:** VT66 **Station Name:** ROSE RIVER

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	4/25/2007 1:10:00 PM		0	2	0	2	147.7	150.2	149	1.801	1.71%
Ca_Ions_Grab (SHEN)	µeq/L	4/25/2007 1:10:00 PM		0	2	0	2	108.6	109.2	108.9	0.4079	0.53%
Cl_Ions_Grab (SHEN)	µeq/L	4/25/2007 1:10:00 PM		0	2	0	2	30.23	30.39	30.31	0.1133	0.53%

NPSTORET Precision Analysis

Filtered Results

Project ID: VTSSS **Station ID:** VT66 **Station Name:** ROSE RIVER

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
Cond_VWR_Manual_Grab (SHEN)	µS/cm	4/25/2007 1:10:00 PM		0	2	0	2	27.1	27.3	27.2	0.1414	0.74%
IONRATIO_MET_IC2_GRAB (SHEN)	None	4/25/2007 1:10:00 PM		0	2	0	2	0.9036	0.9216	0.9126	0.0127	1.97%
K_Ions_Grab (SHEN)	µeq/L	4/25/2007 1:10:00 PM		0	2	0	2	4.868	4.871	4.869	0.0026	0.08%
Mg_Ions_Grab (SHEN)	µeq/L	4/25/2007 1:10:00 PM		0	2	0	2	81.92	82	81.96	0.0539	0.09%
Na_Ions_Grab (SHEN)	µeq/L	4/25/2007 1:10:00 PM		0	2	0	2	61.44	61.73	61.59	0.1997	0.46%
NH4_Ions_Grab (SHEN)	µeq/L	4/25/2007 1:10:00 PM		0	2	2	0	<0.013	<0.013	***	***	***
NO3_Ions_Grab (SHEN)	µeq/L	4/25/2007 1:10:00 PM		0	2	1	1	<0.081	2.467	2.467	***	***
pH_Metrohm_Grab (SHEN)	None	4/25/2007 1:10:00 PM		0	2	0	2	7.06	7.082	7.071	0.0155	0.31%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	4/25/2007 1:10:00 PM		0	2	0	2	232.6	237	234.8	3.133	1.89%
SBC_IC2_GRAB (SHEN)	µeq/L	4/25/2007 1:10:00 PM		0	2	0	2	257.2	257.4	257.3	0.1517	0.08%
SiO2_TC_Grab (SHEN)	µmol/L	4/25/2007 1:10:00 PM		0	2	0	2	146.3	147.7	147	0.9797	0.94%
SO4_Ions_Grab (SHEN)	µeq/L	4/25/2007 1:10:00 PM		0	2	0	2	53.94	54.64	54.29	0.4971	1.29%

Project ID: VTSSS **Station ID:** VT75 **Station Name:** WHITE OAK CANYON RUN

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (SHEN)	µeq/L	10/29/2007 3:10:00 PM		0	2	0	2	156.3	157.8	157.1	1.036	0.93%
Ca_Ions_Grab (SHEN)	µeq/L	10/29/2007 3:10:00 PM		360	2	0	2	121.8	121.9	121.9	0.1225	0.14%
Cl_Ions_Grab (SHEN)	µeq/L	10/29/2007 3:10:00 PM		0	2	0	2	41.73	41.83	41.78	0.0753	0.25%
Cond_VWR_Manual_Grab (SHEN)	µS/cm	10/29/2007 3:10:00 PM		0	2	0	2	25.5	25.6	25.55	0.0707	0.39%
IONRATIO_MET_IC2_GRAB (SHEN)	None	10/29/2007 3:10:00 PM		5328	2	0	2	0.9386	0.9388	0.9387	0.00008	0.01%
K_Ions_Grab (SHEN)	µeq/L	10/29/2007 3:10:00 PM		360	2	0	2	5.382	5.494	5.438	0.0792	2.06%
Mg_Ions_Grab (SHEN)	µeq/L	10/29/2007 3:10:00 PM		360	2	0	2	90.47	90.6	90.54	0.09	0.14%

NPSTORET Precision Analysis

Filtered Results

Project ID: VTSSS **Station ID:** VT75 **Station Name:** WHITE OAK CANYON RUN

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
Na_Ions_Grab (SHEN)	µeq/L	10/29/2007 3:10:00 PM		360	2	0	2	56.94	57.08	57.01	0.0985	0.24%
NH4_Ions_Grab (SHEN)	µeq/L	10/29/2007 3:10:00 PM		360	2	2	0	<0.013	<0.013	***	***	***
NO3_Ions_Grab (SHEN)	µeq/L	10/29/2007 3:10:00 PM		0	2	2	0	<0.081	<0.081	***	***	***
pH_Metrohm_Grab (SHEN)	None	10/29/2007 3:10:00 PM		0	2	0	2	6.69	6.73	6.71	0.0279	0.59%
SAA_MET_IC2_GRAB (SHEN)	µeq/L	10/29/2007 3:10:00 PM		0	2	0	2	257.8	258.1	258	0.2027	0.11%
SBC_IC2_GRAB (SHEN)	µeq/L	10/29/2007 3:10:00 PM		5328	2	0	2	274.7	275	274.8	0.1932	0.10%
SiO2_TC_Grab (SHEN)	µmol/L	10/29/2007 3:10:00 PM		0	2	0	2	142.6	143	142.8	0.2807	0.28%
SO4_Ions_Grab (SHEN)	µeq/L	10/29/2007 3:10:00 PM		0	2	0	2	58.46	59.74	59.1	0.9087	2.17%

Project ID: VTSSS **Station ID:** VT77 **Station Name:** MATTS CREEK

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
ANC_Metrohm_Grab (UVAVTSSS)	µeq/L	10/29/2007 10:38:00 AM		0	2	0	2	40.88	41.2	41.04	0.2206	0.76%
Ca_Ions_Grab (UVAVTSSS)	µeq/L	10/29/2007 10:38:00 AM		0	2	0	2	28.57	29.35	28.96	0.5486	2.68%
Cl_Ions_Grab (UVAVTSSS)	µeq/L	10/29/2007 10:38:00 AM		0	2	0	2	23.32	23.34	23.33	0.0176	0.11%
Cond_VWR_Manual_Grab (UVAVTSSS)	µS/cm	10/29/2007 10:38:00 AM		0	2	0	2	16.7	16.9	16.8	0.1414	1.19%
IONRATIO_MET_IC2_GRAB (UVAVTSSS)	None	10/29/2007 10:38:00 AM		0	2	0	2	0.9323	0.937	0.9347	0.0033	0.50%
K_Ions_Grab (UVAVTSSS)	µeq/L	10/29/2007 10:38:00 AM		0	2	0	2	31.86	31.87	31.87	0.0068	0.03%
Mg_Ions_Grab (UVAVTSSS)	µeq/L	10/29/2007 10:38:00 AM		0	2	0	2	50.85	51.1	50.97	0.1743	0.48%
Na_Ions_Grab (UVAVTSSS)	µeq/L	10/29/2007 10:38:00 AM		0	2	0	2	43.83	43.87	43.85	0.0298	0.10%

NPSTORET Precision Analysis

Filtered Results

Project ID: VTSSS **Station ID:** VT77 **Station Name:** MATTS CREEK

Local Name	Units	Sample Date/Time	Depth (m)	Analysis Date/Time Difference (hrs)	Count	Cens.	Incl.	Minimum	Maximum	Mean	Std Dev	% Rel Precision
NH4_Ions_Grab (UVAVTSSS)	µeq/L	10/29/2007 10:38:00 AM		0	2	2	0	<0.013	<0.013	***	***	***
NO3_Ions_Grab (UVAVTSSS)	µeq/L	10/29/2007 10:38:00 AM		0	2	2	0	<0.081	<0.081	***	***	***
pH_Metrohm_Grab (UVAVTSSS)	None	10/29/2007 10:38:00 AM		0	2	0	2	6.269	6.316	6.293	0.0331	0.74%
SAA_MET_IC2_GRAB (UVAVTSSS)	µeq/L	10/29/2007 10:38:00 AM		0	2	0	2	145.4	145.6	145.5	0.1278	0.12%
SBC_IC2_GRAB (UVAVTSSS)	µeq/L	10/29/2007 10:38:00 AM		0	2	0	2	155.2	156.1	155.7	0.6864	0.62%
SiO2_TC_Grab (UVAVTSSS)	µmol/L	10/29/2007 10:38:00 AM		0	2	0	2	111.6	112	111.8	0.2743	0.35%
SO4_Ions_Grab (UVAVTSSS)	µeq/L	10/29/2007 10:38:00 AM		0	2	0	2	81.02	81.13	81.07	0.0752	0.13%

NPSTORET Precision Analysis

Filtered Results

% Relative Precision Summary Statistics

Local Name	Mean	Minimum	Maximum	Local Name	Mean	Minimum	Maximum
ANC_Manual_Grab (UVAVTSSS)	6.97%	6.97%	6.97%	ANC_Metrohm_Grab (SHEN)	1.26%	0.01%	5.53%
ANC_Metrohm_Grab (UVAVTSSS)	10.44%	0.04%	118.45%	Ca_Ions_Grab (SHEN)	1.59%	0.01%	9.14%
Ca_Ions_Grab (UVAVTSSS)	1.29%	0.13%	3.69%	Cl_Ions_Grab (SHEN)	0.78%	0.00%	3.78%
Cl_Ions_Grab (UVAVTSSS)	1.19%	0.10%	7.08%	Cond_VWR_Manual_Grab (SHEN)	0.96%	0.00%	4.58%
Cond_VWR_Manual_Grab (UVAVTSSS)	0.97%	0.00%	2.50%	discharge velocity (SHEN)	19.08%	4.91%	38.69%
IONRATIO_MET_IC2_GRAB (SHEN)	1.38%	0.01%	4.25%	IONRATIO_MET_IC2_GRAB (UVAVTSSS)	2.45%	0.42%	8.61%
K_Ions_Grab (SHEN)	1.19%	0.00%	6.94%	K_Ions_Grab (UVAVTSSS)	0.99%	0.00%	7.57%
Mg_Ions_Grab (SHEN)	0.64%	0.02%	3.83%	Mg_Ions_Grab (UVAVTSSS)	0.40%	0.04%	1.31%
Na_Ions_Grab (SHEN)	0.48%	0.00%	3.73%	Na_Ions_Grab (UVAVTSSS)	0.48%	0.03%	2.35%
NH4_Ions_Grab (SHEN)	79.46%	5.24%	174.11%	NH4_Ions_Grab (UVAVTSSS)	41.50%	37.25%	45.75%
NO3_Ions_Grab (SHEN)	20.28%	1.75%	75.48%	NO3_Ions_Grab (UVAVTSSS)	43.14%	1.42%	166.52%
pH_Manual_Grab (UVAVTSSS)	0.75%	0.75%	0.75%	pH_Metrohm_Grab (SHEN)	0.73%	0.07%	3.21%
pH_Metrohm_Grab (UVAVTSSS)	1.15%	0.07%	3.84%	SAA_2PT_IC2_GRAB (UVAVTSSS)	2.76%	2.76%	2.76%
SAA_MET_IC2_GRAB (SHEN)	1.09%	0.00%	6.03%	SAA_MET_IC2_GRAB (UVAVTSSS)	2.40%	0.03%	8.63%
SBC_IC2_GRAB (SHEN)	0.92%	0.00%	3.95%	SBC_IC2_GRAB (UVAVTSSS)	0.66%	0.03%	2.57%
SiO2_TC_Grab (SHEN)	0.44%	0.00%	2.13%	SiO2_TC_Grab (UVAVTSSS)	0.35%	0.00%	0.71%
SO4_Ions_Grab (SHEN)	0.78%	0.00%	2.20%	SO4_Ions_Grab (UVAVTSSS)	0.85%	0.04%	5.65%
T_AL_TC_Grab (SHEN)	4.05%	3.03%	6.79%	T_AL_TC_Grab (UVAVTSSS)	1.15%	0.48%	1.83%

Results filtered for:
Organization = PEFO: Petrified Forest National Park
SHEN: Shenandoah National Park
UVAVTSSS: University of Virginia non-NPS watersheds
Station = Include Trip QC And All Station Visit Results
Exclude Analytical Groups
Activity Type = Field Msr/Obs
Field Msr/Obs-Habitat Assessment
Field Msr/Obs-Portable Data Logger
NPS Continuous Data Logger
NPS Depth Profile
NPS Quality Control Regular/Routine
NPS Quality Control Regular/Routine Replicate
NPS Regular/Routine

NPSTORET Precision Analysis

Filtered Results

Quality Control Field Replicate Habitat Assessment
Quality Control Field Replicate Msr/Obs
Quality Control Field Replicate Portable Data Logger
Quality Control Sample-Blind Duplicate

*** Indicates Anaylsis Not Done Since Data Censored

NPSTORET Trip Blank Summary Statistics - Period of Record

Filtered Results

Local Name	Units	Period of Record	Count	Cens.	Cens. % < MDL	Cens. % < LQL	Incl.	Min.	Max.	Mean	Median	Std Dev
ANC_Manual_Grab (SHEN)	µeq/L	1/26/2005 - 10/25/2006	8	0	0.00%	0.00%	8	-1.7	1.17	-0.6503	---	1.073
ANC_Metrohm_Grab (SHEN)	µeq/L	10/25/2006 - 10/25/2006	1	0	0.00%	0.00%	1	-1.13626	-1.13626	-1.13626	---	
Ca_AA_Grab (SHEN)	µeq/L	1/26/2005 - 7/27/2005	3	3	100.00%	0.00%	3	<0.6345	<0.6345	0.6345	---	0
Ca_Ions_Grab (SHEN)	µeq/L	10/31/2005 - 10/25/2006	5	5	20.00%	80.00%	5	<0.234	<0.8928	0.761	---	0.2946
Cl_IC_Grab (SHEN)	µeq/L	1/26/2005 - 7/27/2005	3	3	100.00%	0.00%	3	<0.2845	<0.2845	0.2845	---	0
Cl_Ions_Grab (SHEN)	µeq/L	10/31/2005 - 10/25/2006	5	0	0.00%	0.00%	5	0.3927	0.5813	0.4615	---	0.0749
Cond_VWR_Manual_Grab (SHEN)	µS/cm	1/26/2005 - 10/25/2006	8	3	0.00%	37.50%	8	<0.309	0.8	0.5409	---	0.2022
K_AA_Grab (SHEN)	µeq/L	1/26/2005 - 7/27/2005	3	3	100.00%	0.00%	3	<0.1245	<0.1245	0.1245	---	0
K_Ions_Grab (SHEN)	µeq/L	10/31/2005 - 10/25/2006	5	1	20.00%	0.00%	5	<0.0145	0.3979	0.2715	---	0.1596
Mg_AA_Grab (SHEN)	µeq/L	1/26/2005 - 7/27/2005	3	3	100.00%	0.00%	3	<0.289	<0.289	0.289	---	0
Mg_Ions_Grab (SHEN)	µeq/L	10/31/2005 - 10/25/2006	5	2	20.00%	20.00%	5	<0.109	0.9286	0.6245	---	0.35
Na_AA_Grab (SHEN)	µeq/L	1/26/2005 - 7/27/2005	3	3	100.00%	0.00%	3	<0.355	<0.355	0.355	---	0
Na_Ions_Grab (SHEN)	µeq/L	10/31/2005 - 10/25/2006	5	1	20.00%	0.00%	5	<0.0145	0.3805	0.2625	---	0.1536
NH4_Ions_Grab (SHEN)	µeq/L	10/31/2005 - 10/25/2006	5	1	20.00%	0.00%	5	<0.0065	0.1496	0.1102	---	0.0596
NH4_TC_Grab500 (SHEN)	µeq/L	1/26/2005 - 7/27/2005	3	3	100.00%	0.00%	3	<0.21	<0.21	0.21	---	0
NO3_IC_Grab (SHEN)	µeq/L	1/26/2005 - 7/27/2005	3	3	100.00%	0.00%	3	<0.1005	<0.1005	0.1005	---	0
NO3_Ions_Grab (SHEN)	µeq/L	10/31/2005 - 10/25/2006	5	5	100.00%	0.00%	5	<0.0405	<0.0405	0.0405	---	0
pH_Manual_Grab (SHEN)	None	1/26/2005 - 10/25/2006	8	0	0.00%	0.00%	8	5.74	6.04	5.889	---	0.0948
converted pH	None							5.74	6.04	5.88	---	0.0953
H+ computed from pH	µeq/l							0.912	1.82	1.319	---	0.286
pH_Metrohm_Grab (SHEN)	None	10/25/2006 - 10/25/2006	1	0	0.00%	0.00%	1	5.787	5.787	5.787	---	
converted pH	None							5.787	5.787	5.787	---	
H+ computed from pH	µeq/l							1.634	1.634	1.634	---	
SiO2_TC_Grab (SHEN)	µmol/L	1/26/2005 - 10/25/2006	8	8	87.50%	12.50%	8	<0.5255	<2.005	0.7105	---	0.5232
SO4_IC_Grab (SHEN)	µeq/L	1/26/2005 - 7/27/2005	3	3	100.00%	0.00%	3	<0.5105	<0.5105	0.5105	---	0
SO4_Ions_Grab (SHEN)	µeq/L	10/31/2005 - 10/25/2006	5	1	20.00%	0.00%	5	<0.155	2.675	1.831	---	1.034
T_AL_TC_Grab (SHEN)	µg/l	1/26/2005 - 10/25/2006	8	8	75.00%	25.00%	8	<0.762	<2.907	1.298	---	0.9929

NPSTORET Trip Blank Summary Statistics - Period of Record

Filtered Results

Results filtered for:
Organization = SHEN: Shenandoah National Park
UVAVTSSS: University of Virginia non-NPS watersheds
Station = Include Trip QC And All Station Visit Results
Activities with Characteristic = ANC_5PT_Manual_Grab_RE (UVAVTSSS)
or ANC_Manual_AutoStream (SHEN)
or ANC_Manual_AutoStream (UVAVTSSS)
or ANC_Manual_Grab (SHEN)
or ANC_Manual_Grab (UVAVTSSS)
or ANC_Metrohm_AutoStream (SHEN)
or ANC_Metrohm_AutoStream (UVAVTSSS)
or ANC_Metrohm_Grab (SHEN)
or ANC_Metrohm_Grab (UVAVTSSS)
or Ca_AA_AutoPpt (SHEN)
or Ca_AA_AutoPpt (UVAVTSSS)
or Ca_AA_AutoStream (SHEN)
or Ca_AA_AutoStream (UVAVTSSS)
or Ca_AA_Bulk (SHEN)
or Ca_AA_Bulk (UVAVTSSS)
or Ca_AA_Grab (SHEN)
or Ca_AA_Grab (UVAVTSSS)
or Ca_AA_Grab_F_A (UVAVTSSS)
or Ca_AA_Wet (SHEN)
or Ca_AA_Wet (UVAVTSSS)
or Ca_Chang_LH (SHEN)
or Ca_Chang_LH (UVAVTSSS)
or Ca_Ions_AutoStream (SHEN)
or Ca_Ions_AutoStream (UVAVTSSS)
or Ca_Ions_Grab (SHEN)
or Ca_Ions_Grab (UVAVTSSS)
or Cl_Chang_LH (SHEN)
or Cl_Chang_LH (UVAVTSSS)
or Cl_IC_AutoPpt (SHEN)
or Cl_IC_AutoPpt (UVAVTSSS)
or Cl_IC_AutoStream (SHEN)
or Cl_IC_AutoStream (UVAVTSSS)
or Cl_IC_Bulk (SHEN)
or Cl_IC_Bulk (UVAVTSSS)
or Cl_IC_Grab (SHEN)

or Cl_IC_Grab (UVAVTSSS)
or CL_IC_Grab_F_RE (UVAVTSSS)
or Cl_IC_Wet (SHEN)
or Cl_IC_Wet (UVAVTSSS)
or Cl_Ions_AutoStream (SHEN)
or Cl_Ions_AutoStream (UVAVTSSS)
or Cl_Ions_Grab (SHEN)
or Cl_Ions_Grab (UVAVTSSS)
or Cl_TC_Grab (SHEN)
or Cl_TC_Grab (UVAVTSSS)
or Cond_VWR_Manual_Autoppt (SHEN)
or Cond_VWR_Manual_Autoppt (UVAVTSSS)
or Cond_VWR_Manual_AutoStream (SHEN)
or Cond_VWR_Manual_AutoStream (UVAVTSSS)
or Cond_VWR_Manual_Bulk (SHEN)
or Cond_VWR_Manual_Bulk (UVAVTSSS)
or Cond_VWR_Manual_Grab (SHEN)
or Cond_VWR_Manual_Grab (UVAVTSSS)
or Cond_VWR_Manual_wet (SHEN)
or Cond_VWR_Manual_wet (UVAVTSSS)
or Cond_YSI_Manual_AutoStream (SHEN)
or Cond_YSI_Manual_AutoStream (UVAVTSSS)
or Cond_YSI_Manual_Grab (SHEN)
or Cond_YSI_Manual_Grab (UVAVTSSS)
or Cond_YSI_Manual_Grab_RE (UVAVTSSS)
or days_since_precip (SHEN)
or days_since_precip (UVAVTSSS)
or discharge velocity (SHEN)
or DOC_DC80_UMD_AutoStream (SHEN)
or DOC_DC80_UMD_AutoStream (UVAVTSSS)
or DOC_DC80_UMD_Grab (SHEN)
or DOC_DC80_UMD_Grab (UVAVTSSS)
or DOC_DC80_UVA_AutoStream (SHEN)
or DOC_DC80_UVA_AutoStream (UVAVTSSS)
or DOC_DC80_UVA_Grab (SHEN)
or DOC_DC80_UVA_Grab (UVAVTSSS)
or DOC_DC80_UVA_Grab_F_A_RE (UVAVTSSS)
or DOC_PHN_8K_PA_UVA_AutoStream (SHEN)
or DOC_PHN_8K_PA_UVA_Grab (SHEN)

or DOC_PHN_8K_UMD_AutoStream (SHEN)
or DOC_PHN_8K_UMD_AutoStream (UVAVTSSS)
or DOC_PHN_8K_UMD_Grab (SHEN)
or DOC_PHN_8K_UMD_Grab (UVAVTSSS)
or DOC_PHN_8K_UVA_AutoStream (SHEN)
or DOC_PHN_8K_UVA_AutoStream (UVAVTSSS)
or DOC_PHN_8K_UVA_Grab (SHEN)
or DOC_PHN_8K_UVA_Grab (UVAVTSSS)
or flow_streamStage (SHEN)
or flow_streamStage (UVAVTSSS)
or general_observation (SHEN)
or general_observation (UVAVTSSS)
or K_AA_AutoPpt (SHEN)
or K_AA_AutoPpt (UVAVTSSS)
or K_AA_AutoStream (SHEN)
or K_AA_AutoStream (UVAVTSSS)
or K_AA_Bulk (SHEN)
or K_AA_Bulk (UVAVTSSS)
or K_AA_Grab (SHEN)
or K_AA_Grab (UVAVTSSS)
or K_AA_Grab_F_A (UVAVTSSS)
or K_AA_Wet (SHEN)
or K_AA_Wet (UVAVTSSS)
or K_Chang_LH (SHEN)
or K_Chang_LH (UVAVTSSS)
or K_Ions_AutoStream (SHEN)
or K_Ions_AutoStream (UVAVTSSS)
or K_Ions_Grab (SHEN)
or K_Ions_Grab (UVAVTSSS)
or Mg_AA_AutoPpt (SHEN)
or Mg_AA_AutoPpt (UVAVTSSS)
or Mg_AA_AutoStream (SHEN)
or Mg_AA_AutoStream (UVAVTSSS)
or Mg_AA_Bulk (SHEN)
or Mg_AA_Bulk (UVAVTSSS)
or Mg_AA_Grab (SHEN)
or Mg_AA_Grab (UVAVTSSS)
or Mg_AA_Grab_F_A (UVAVTSSS)
or Mg_AA_Wet (SHEN)

or Mg_AA_Wet (UVAVTSSS)
or Mg_Chang_LH (SHEN)
or Mg_Chang_LH (UVAVTSSS)
or Mg_Ions_AutoStream (SHEN)
or Mg_Ions_AutoStream (UVAVTSSS)
or Mg_Ions_Grab (SHEN)
or Mg_Ions_Grab (UVAVTSSS)
or Na_AA_AutoPpt (SHEN)
or Na_AA_AutoPpt (UVAVTSSS)
or Na_AA_AutoStream (SHEN)
or Na_AA_AutoStream (UVAVTSSS)
or Na_AA_Bulk (SHEN)
or Na_AA_Bulk (UVAVTSSS)
or Na_AA_Grab (SHEN)
or Na_AA_Grab (UVAVTSSS)
or Na_AA_Grab_F_A (UVAVTSSS)
or Na_AA_Wet (SHEN)
or Na_AA_Wet (UVAVTSSS)
or Na_Chang_LH (SHEN)
or Na_Chang_LH (UVAVTSSS)
or Na_Ions_AutoStream (SHEN)
or Na_Ions_AutoStream (UVAVTSSS)
or Na_Ions_Grab (SHEN)
or Na_Ions_Grab (UVAVTSSS)
or NH4_Chang_LH (SHEN)
or NH4_Chang_LH (UVAVTSSS)
or NH4_Ions_AutoStream (SHEN)
or NH4_Ions_AutoStream (UVAVTSSS)
or NH4_Ions_Grab (SHEN)
or NH4_Ions_Grab (UVAVTSSS)
or NH4_TC_AutoPpt (SHEN)
or NH4_TC_AutoPpt (UVAVTSSS)
or NH4_TC_AutoStream (SHEN)
or NH4_TC_AutoStream (UVAVTSSS)
or NH4_TC_Bulk (SHEN)
or NH4_TC_Bulk (UVAVTSSS)
or NH4_TC_Grab_F_A_RE (UVAVTSSS)
or NH4_TC_Grab250 (SHEN)
or NH4_TC_Grab250 (UVAVTSSS)

or NH4_TC_Grab500 (SHEN)
or NH4_TC_Grab500 (UVAVTSSS)
or NH4_TC_Wet (SHEN)
or NH4_TC_Wet (UVAVTSSS)
or NO3_Chang_LH (SHEN)
or NO3_Chang_LH (UVAVTSSS)
or NO3_IC_AutoPpt (SHEN)
or NO3_IC_AutoPpt (UVAVTSSS)
or NO3_IC_AutoStream (SHEN)
or NO3_IC_AutoStream (UVAVTSSS)
or NO3_IC_Bulk (SHEN)
or NO3_IC_Bulk (UVAVTSSS)
or NO3_IC_Grab (SHEN)
or NO3_IC_Grab (UVAVTSSS)
or NO3_IC_Grab_F_RE (UVAVTSSS)
or NO3_IC_Wet (SHEN)
or NO3_IC_Wet (UVAVTSSS)
or NO3_Ions_AutoStream (SHEN)
or NO3_Ions_AutoStream (UVAVTSSS)
or NO3_Ions_Grab (SHEN)
or NO3_Ions_Grab (UVAVTSSS)
or NO3_TC_Grab (SHEN)
or NO3_TC_Grab (UVAVTSSS)
or Non-filterable Residue (SHEN)
or Non-filterable Residue (UVAVTSSS)
or O_AL_TC_AutoStream (SHEN)
or O_AL_TC_AutoStream (UVAVTSSS)
or O_AL_TC_Grab (SHEN)
or O_AL_TC_Grab (UVAVTSSS)
or O_AL_TC_Grab_F_RE (UVAVTSSS)
or pH_Manual_AutoPpt (SHEN)
or pH_Manual_AutoPpt (UVAVTSSS)
or pH_Manual_AutoStream (SHEN)
or pH_Manual_AutoStream (UVAVTSSS)
or pH_Manual_Bulk (SHEN)
or pH_Manual_Bulk (UVAVTSSS)
or pH_Manual_Grab (SHEN)
or pH_Manual_Grab (UVAVTSSS)
or pH_Manual_Grab_RE (UVAVTSSS)

or pH_Manual_Wet (SHEN)
or pH_Manual_Wet (UVAVTSSS)
or pH_Metrohm_AutoStream (SHEN)
or pH_Metrohm_AutoStream (UVAVTSSS)
or pH_Metrohm_Grab (SHEN)
or pH_Metrohm_Grab (UVAVTSSS)
or SiO2_TC_AutoPpt (SHEN)
or SiO2_TC_AutoPpt (UVAVTSSS)
or SiO2_TC_AutoStream (SHEN)
or SiO2_TC_AutoStream (UVAVTSSS)
or SiO2_TC_Bulk (SHEN)
or SiO2_TC_Bulk (UVAVTSSS)
or SiO2_TC_Grab (SHEN)
or SiO2_TC_Grab (UVAVTSSS)
or SiO2_TC_Grab_F_RE (UVAVTSSS)
or SiO2_TC_Wet (SHEN)
or SiO2_TC_Wet (UVAVTSSS)
or SO4_Chang_LH (SHEN)
or SO4_Chang_LH (UVAVTSSS)
or SO4_IC_AutoPpt (SHEN)
or SO4_IC_AutoPpt (UVAVTSSS)
or SO4_IC_AutoStream (SHEN)
or SO4_IC_AutoStream (UVAVTSSS)
or SO4_IC_Bulk (SHEN)
or SO4_IC_Bulk (UVAVTSSS)
or SO4_IC_Grab (SHEN)
or SO4_IC_Grab (UVAVTSSS)
or SO4_IC_Grab_F_RE (UVAVTSSS)
or SO4_IC_Wet (SHEN)
or SO4_IC_Wet (UVAVTSSS)
or SO4_Ions_AutoStream (SHEN)
or SO4_Ions_AutoStream (UVAVTSSS)
or SO4_Ions_Grab (SHEN)
or SO4_Ions_Grab (UVAVTSSS)
or SO4_TC_Grab (SHEN)
or SO4_TC_Grab (UVAVTSSS)
or T_AL_TC_AutoStream (SHEN)
or T_AL_TC_AutoStream (UVAVTSSS)
or T_AL_TC_Grab (SHEN)

or T_AL_TC_Grab (UVAVTSSS)
or T_AL_TC_Grab_F_RE (UVAVTSSS)
or Temp_Water_C (SHEN)
or Temp_Water_C (UVAVTSSS)
or Volatile Residue (SHEN)
or Volatile Residue (UVAVTSSS)
or voltage_solarLoad (SHEN)
or voltage_StevensClock (SHEN)
or water_appearance (SHEN)
or water_appearance (UVAVTSSS)
or water_turbidity (SHEN)
or water_turbidity (UVAVTSSS)
or WatLev_AXSYS (SHEN)
or WatLev_Chart (SHEN)
or WatLev_Staff (SHEN)
or weather (SHEN)
or weather (UVAVTSSS)

Only display results that meet characteristic criteria
Activity Type = Quality Control Sample-Trip Blank
Date (>=1/1/2005 and <=12/31/2006)
Value Status <> Rejected

Censored Data Substitutions: *Non-detect=0.5* DetectionLimit, *Present <QL=0.6 * LowerQuantificationLimit

Appendix 7: LIMS QC results, 2007

QCs used during the period

Lab QC Type	Lab QC Name	Lab QC Comment
CRM	84_SW02	ENVIRONMENT CANADA PT STUDY 84 SAMPLE SW-02
CRM	84_SW04	ENVIRONMENT CANADA PT STUDY 84 SAMPLE SW-04
CRM	84_SW05	ENVIRONMENT CANADA PT STUDY 84 SAMPLE SW-05
CRM	87_SW10	ENVIRONMENT CANADA PT STUDY 87: SAMPLE SW10
CRM	91_SW01	ENVIRONMENT CANADA PT STUDY 91 SAMPLE SW-01
CRM	91_SW03	ENVIRONMENT CANADA PT STUDY 91 SAMPLE SW-03
CRM	91_SW06	ENVIRONMENT CANADA PT STUDY 91 SAMPLE SW-06
CRM	91_SW08	ENVIRONMENT CANADA PT STUDY 91 SAMPLE SW-08
CRM	AE02 04/05/2004	ENVIRONMENT CANADA ACID RAINWATER QC SAMPLE AES-02
CRM	FN13	NATURAL AUDIT SAMPLE PROVIDED BY LOCKHEED ENGINEERING AND SCIENCES COMPANY
CRM	FN15	NATURAL AUDIT SAMPLE PROVIDED BY LOCKHEED ENGINEERING AND SCIENCES COMPANY
CRM	FN16	NATURAL AUDIT SAMPLE PROVIDED BY LOCKHEED ENGINEERING AND SCIENCES COMPANY
CRM	QCP1	INORGANIC VENTURES QCP-RAIN SAMPLE 1 (LOT # X-RN01013)
CRM	QCP2	INORGANIC VENTURES QCP-RAIN SAMPLE 2 (LOT # X-RN01017)
CRM	QCP3	INORGANIC VENTURES QCP RAIN SAMPLE 3 (LOT # X-RN01015)
LAB	ALCALQCCS	ALUMINUM CALIBRATION QUALITY CONTROL CHECK SAMPLE
LAB	ALDETQCCS	ALUMINUM DETECTION LIMIT QUALITY CONTROL CHECK SAMPLE
LAB	ALMDLSS	ALUMINUM METHOD DETECTION LIMIT STANDARD SOLUTION
LAB	ANION_MIDSTD	ANION STANDARD 3 FOR QC
LAB	CATION_MIDSTD	CATION STANDARD 3 FOR QC
LAB	DIW	DE-IONIZED WATER
LAB	PH 4.60 QCS	LABORATORY-PREPARED PH 4.60 QUALITY CHECK STANDARD
LAB	SILICA LOWLEVEL	SILICA STANDARD 7 FOR QC
LAB	SILICA_MIDSTD	SILICA STANDARD 3 FOR QC
STATISTIC	Titrator	FOR R-SQUARED AND TITRATION SLOPE
SWAS NATURAL MA	NFDR 03/09/2005	CARBOY COLLECTED BY SWAS STAFF
SWAS NATURAL MA	NFDR 06/06/2007	CARBOY COLLECTED BY SWAS STAFF

Lab QC Type	Lab QC Name	Lab QC Comment
SWAS NATURAL MA	PAIN 05/29/2007	CARBOY COLLECTED BY SWAS STAFF
SWAS NATURAL MA	PAIN 12/06/2005	CARBOY COLLECTED BY SWAS STAFF

QC Analysis results

Lab QC Type	Lab QC Name	NPSTORET Procedure ID	EPA STORET Name	Lab Statistic Name	n	Mean	Std Dev	Min	Max	Lab Target Value	Lab Target LSL	Lab Target USL	C_p	Lower Quant Limit
CRM	84_SW02	IONS_IC	Calcium		12	46.32	1.82	43.14	48.54	45.90	43.61	48.20	0.42	1.488
CRM	84_SW02	IONS_IC	Chloride		12	3.24	0.06	3.10	3.31	3.40	2.55	4.25	4.86	0.242
CRM	84_SW02	IONS_IC	Magnesium		12	26.78	0.26	26.37	27.19	26.30	24.99	27.62	1.69	0.694
CRM	84_SW02	IONS_IC	Nitrogen, Nitrate (NO3) as NO3		12	32.62	0.18	32.20	32.90	38.50	36.58	40.43	3.55	0.258
CRM	84_SW02	IONS_IC	Sulfur, sulfate (SO4) as SO4		12	37.09	0.14	36.86	37.35	38.10	36.20	40.01	4.38	0.986
CRM	84_SW04	IONS_IC	Calcium		15	79.32	2.40	74.14	81.90	78.80	74.86	82.74	0.55	1.488
CRM	84_SW04	IONS_IC	Chloride		15	3.66	0.07	3.53	3.82	3.70	2.85	4.55	4.11	0.242
CRM	84_SW04	IONS_IC	Magnesium		15	22.48	0.32	21.87	23.04	23.00	21.85	24.15	1.21	0.694
CRM	84_SW04	IONS_IC	Nitrogen, Nitrate (NO3) as NO3		15	32.07	0.21	31.59	32.51	33.50	31.83	35.18	2.63	0.258
CRM	84_SW04	IONS_IC	Sodium		15	2.11	0.04	2.06	2.22	2.40	1.53	3.27	7.61	0.091
CRM	84_SW04	IONS_IC	Sulfur, sulfate (SO4) as SO4		15	30.11	0.29	29.29	30.54	31.00	29.45	32.55	1.76	0.986
CRM	84_SW05	IONS_IC	Calcium		13	110.45	3.27	103.74	113.32	109.30	103.84	114.77	0.56	1.488
CRM	84_SW05	IONS_IC	Chloride		13	21.25	0.10	21.03	21.41	20.90	19.86	21.95	3.55	0.242
CRM	84_SW05	IONS_IC	Magnesium		13	45.93	0.22	45.59	46.42	45.30	43.04	47.57	3.40	0.694
CRM	84_SW05	IONS_IC	Nitrogen, Nitrate (NO3) as NO3		13	4.21	0.11	4.01	4.38	4.30	3.82	4.78	1.48	0.258
CRM	84_SW05	IONS_IC	Potassium		13	4.59	0.05	4.50	4.67	5.10	4.08	6.12	6.42	0.092
CRM	84_SW05	IONS_IC	Sodium		13	34.77	0.10	34.58	34.91	33.90	32.21	35.60	5.51	0.091
CRM	84_SW05	IONS_IC	Sulfur, sulfate (SO4) as SO4		13	146.05	0.62	145.35	147.81	145.60	138.32	152.88	3.93	0.986
CRM	84_SW05	SILICA_TCON	Silica		2	74.48	0.12	74.40	74.57	74.51	70.78	78.24	10.39	3.342
CRM	87_SW10	SILICA_TCON	Silica		9	72.02	1.15	70.38	73.58	75.11	71.35	78.87	1.09	3.342
CRM	91_SW01	IONS_IC	Calcium		5	43.33	0.49	42.61	43.76	45.40	43.13	47.67	1.56	1.488
CRM	91_SW01	IONS_IC	Chloride		5	34.52	0.31	34.16	34.98	33.60	31.92	35.28	1.81	0.242
CRM	91_SW01	IONS_IC	Magnesium		5	19.26	0.25	18.98	19.62	18.90	17.96	19.85	1.24	0.694

Lab QC Type	Lab QC Name	NPSTORET Procedure ID	EPA STORET Name	Lab Statistic Name	n	Mean	Std Dev	Min	Max	Lab Target Value	Lab Target LSL	Lab Target USL	C_p	Lower Quant Limit
CRM	91_SW01	IONS_IC	Nitrogen, Nitrate (NO3) as NO3		5	24.00	0.39	23.69	24.60	24.20	22.99	25.41	1.05	0.258
CRM	91_SW01	IONS_IC	Potassium		5	1.88	0.02	1.85	1.89	2.18	1.16	3.20	19.75	0.092
CRM	91_SW01	IONS_IC	Sodium		5	34.55	0.05	34.48	34.60	33.60	31.92	35.28	11.11	0.091
CRM	91_SW01	IONS_IC	Sulfur, sulfate (SO4) as SO4		5	33.28	0.12	33.15	33.46	34.30	32.59	36.02	4.91	0.986
CRM	91_SW03	SILICA_TCON	Silica		8	42.42	0.26	42.10	42.81	42.26	40.15	44.37	2.75	3.342
CRM	91_SW06	IONS_IC	Calcium		1	206.62	.	206.62	206.62	221.60	210.52	232.68	.	1.488
CRM	91_SW06	IONS_IC	Chloride		1	32.30	.	32.30	32.30	31.90	30.31	33.50	.	0.242
CRM	91_SW06	IONS_IC	Magnesium		1	102.40	.	102.40	102.40	101.20	96.14	106.26	.	0.694
CRM	91_SW06	IONS_IC	Nitrogen, Nitrate (NO3) as NO3		1	18.46	.	18.46	18.46	18.30	17.39	19.22	.	0.258
CRM	91_SW06	IONS_IC	Potassium		1	16.06	.	16.06	16.06	16.70	15.68	17.72	.	0.092
CRM	91_SW06	IONS_IC	Sodium		1	68.63	.	68.63	68.63	67.40	64.03	70.77	.	0.091
CRM	91_SW06	IONS_IC	Sulfur, sulfate (SO4) as SO4		1	154.52	.	154.52	154.52	153.90	146.21	161.60	.	0.986
CRM	91_SW08	SILICA_TCON	Silica		2	63.34	0.00	63.34	63.34	63.21	60.05	66.37	717.38	3.342
CRM	AE02 04/05/2004	IONS_IC	Calcium		15	8.18	0.39	7.77	8.92	8.18	7.19	9.18	0.86	1.488
CRM	AE02 04/05/2004	IONS_IC	Chloride		15	3.53	0.09	3.40	3.69	3.38	2.54	4.23	3.04	0.242
CRM	AE02 04/05/2004	IONS_IC	Magnesium		15	2.62	0.56	1.71	4.40	2.47	1.65	3.29	0.49	0.694
CRM	AE02 04/05/2004	IONS_IC	Nitrogen, Nitrate (NO3) as NO3		15	17.00	0.15	16.72	17.32	16.75	15.91	17.59	1.92	0.258
CRM	AE02 04/05/2004	IONS_IC	Nitrogen, ammonium (NH4) as NH4		14	10.15	0.35	9.26	10.46	11.42	10.31	12.52	1.04	0.04
CRM	AE02 04/05/2004	IONS_IC	Sodium		15	2.82	0.15	2.65	3.20	2.92	2.05	3.79	1.99	0.091
CRM	AE02 04/05/2004	IONS_IC	Sulfur, sulfate (SO4) as SO4		15	37.25	0.29	36.86	38.04	37.44	35.57	39.31	2.18	0.986
CRM	FN13	AL_TOT_TCON	Aluminum, Organic + Inorganic Monomeric (reactive aluminum)		2	35.27	0.20	35.13	35.40	58.00	48.00	68.00	17.05	4.845
CRM	FN13	IONS_IC	Calcium		31	107.69	3.63	99.67	113.07	99.26	94.29	104.22	0.46	1.488

Lab QC Type	Lab QC Name	NPSTORET Procedure ID	EPA STORET Name	Lab Statistic Name	n	Mean	Std Dev	Min	Max	Lab Target Value	Lab Target LSL	Lab Target USL	C_p	Lower Quant Limit
CRM	FN13	IONS_IC	Chloride		31	10.20	0.15	9.98	10.71	11.91	11.06	12.76	1.83	0.242
CRM	FN13	IONS_IC	Magnesium		31	40.62	1.11	39.75	45.75	38.74	36.80	40.67	0.58	0.694
CRM	FN13	IONS_IC	Potassium		31	8.04	0.18	7.60	8.51	8.95	7.92	9.97	1.87	0.092
CRM	FN13	IONS_IC	Sodium		31	24.73	0.41	24.48	26.71	25.39	24.12	26.66	1.04	0.091
CRM	FN13	IONS_IC	Sulfur, sulfate (SO4) as SO4		31	120.28	0.59	118.87	121.97	115.09	109.34	120.85	3.23	0.986
CRM	FN13	SILICA_TCON	Silica		11	18.59	0.24	18.13	18.87	17.75	16.86	18.63	1.23	3.342
CRM	FN15	AL_ORG_TCON	Aluminum, Organic Monomeric (reactive aluminum)		1	51.17	.	51.17	51.17	35.00	25.00	45.00	.	4.845
CRM	FN15	AL_TOT_TCON	Aluminum, Organic + Inorganic Monomeric (reactive aluminum)		1	95.07	.	95.07	95.07	165.00	148.50	181.50	.	4.845
CRM	FN15	IONS_IC	Calcium		20	121.95	1.78	116.31	124.04	111.80	106.21	117.39	1.05	1.488
CRM	FN15	IONS_IC	Chloride		20	14.38	0.14	14.22	14.87	15.75	14.90	16.60	1.96	0.242
CRM	FN15	IONS_IC	Magnesium		20	30.08	1.39	25.02	32.77	29.67	28.18	31.15	0.36	0.694
CRM	FN15	IONS_IC	Nitrogen, Nitrate (NO3) as NO3		20	22.73	0.27	22.23	23.13	22.00	20.90	23.10	1.35	0.258
CRM	FN15	IONS_IC	Potassium		20	10.82	0.22	10.32	11.32	11.35	10.33	12.37	1.56	0.092
CRM	FN15	IONS_IC	Sodium		20	31.91	1.27	31.03	36.75	31.08	29.53	32.64	0.41	0.091
CRM	FN15	IONS_IC	Sulfur, sulfate (SO4) as SO4		20	136.67	0.61	135.67	137.65	130.92	124.37	137.46	3.56	0.986
CRM	FN16	IONS_IC	Calcium		31	291.15	8.84	274.16	305.00	285.96	271.66	300.25	0.54	1.488
CRM	FN16	IONS_IC	Chloride		34	27.55	0.50	26.50	28.86	27.67	26.28	29.05	0.92	0.242
CRM	FN16	IONS_IC	Magnesium		34	137.11	0.80	135.30	138.77	131.33	124.77	137.90	2.72	0.694
CRM	FN16	IONS_IC	Nitrogen, Nitrate (NO3) as NO3		34	4.79	0.29	4.37	5.43	5.93	5.45	6.42	0.56	0.258
CRM	FN16	IONS_IC	Potassium		34	18.68	0.39	17.83	19.08	19.29	18.27	20.31	0.87	0.092
CRM	FN16	IONS_IC	Sodium		34	44.53	0.56	43.29	46.45	44.13	41.93	46.34	1.31	0.091
CRM	FN16	IONS_IC	Sulfur, sulfate (SO4) as SO4		34	176.68	0.74	174.16	178.17	174.33	165.62	183.05	3.91	0.986

Lab QC Type	Lab QC Name	NPSTORET Procedure ID	EPA STORET Name	Lab Statistic Name	n	Mean	Std Dev	Min	Max	Lab Target Value	Lab Target LSL	Lab Target USL	C_p	Lower Quant Limit
CRM	FN16	SILICA_TCON	Silica		10	37.52	0.27	37.14	38.03	37.30	35.44	39.17	2.33	3.342
CRM	QCP1	IONS_IC	Chloride		31	14.42	0.24	13.71	14.95	14.20	13.35	15.05	1.17	0.242
CRM	QCP1	IONS_IC	Magnesium		31	7.66	0.36	6.78	8.66	7.60	6.78	8.42	0.75	0.694
CRM	QCP1	IONS_IC	Nitrogen, Nitrate (NO3) as NO3		31	11.44	0.09	11.27	11.64	11.50	10.93	12.08	2.05	0.258
CRM	QCP1	IONS_IC	Nitrogen, ammonium (NH4) as NH4		31	13.73	0.84	11.25	14.68	14.00	12.89	15.11	0.44	0.04
CRM	QCP1	IONS_IC	Potassium		31	2.91	0.13	2.76	3.47	3.48	2.46	4.50	2.59	0.092
CRM	QCP1	IONS_IC	Sodium		31	4.95	0.12	4.86	5.29	5.70	4.83	6.57	2.51	0.091
CRM	QCP1	IONS_IC	Sulfur, sulfate (SO4) as SO4		31	62.36	0.34	61.15	63.02	62.98	59.83	66.13	3.08	0.986
CRM	QCP2	IONS_IC	Calcium		8	15.66	0.78	13.99	16.33	17.12	16.12	18.11	0.43	1.488
CRM	QCP2	IONS_IC	Chloride		8	58.10	0.23	57.76	58.39	57.53	54.65	60.40	4.12	0.242
CRM	QCP2	IONS_IC	Magnesium		8	35.91	1.32	33.48	37.09	36.95	35.11	38.80	0.47	0.694
CRM	QCP2	IONS_IC	Nitrogen, Nitrate (NO3) as NO3		8	59.47	0.16	59.31	59.79	58.64	55.70	61.57	5.98	0.258
CRM	QCP2	IONS_IC	Nitrogen, ammonium (NH4) as NH4		3	54.02	0.47	53.70	54.55	57.78	54.89	60.67	2.07	0.04
CRM	QCP2	IONS_IC	Potassium		8	19.90	0.45	18.80	20.15	20.22	19.20	21.25	0.76	0.092
CRM	QCP2	IONS_IC	Sodium		8	64.85	0.23	64.51	65.18	64.25	61.04	67.46	4.58	0.091
CRM	QCP2	IONS_IC	Sulfur, sulfate (SO4) as SO4		8	191.19	0.87	189.83	192.52	190.92	181.38	200.47	3.66	0.986
CRM	QCP3	IONS_IC	Calcium		11	8.72	0.70	7.97	10.23	9.93	8.93	10.93	0.48	1.488
CRM	QCP3	IONS_IC	Chloride		11	34.32	0.14	34.09	34.62	33.56	31.88	35.24	3.86	0.242
CRM	QCP3	IONS_IC	Magnesium		11	19.84	0.09	19.67	20.04	20.90	19.86	21.95	3.69	0.694
CRM	QCP3	IONS_IC	Nitrogen, Nitrate (NO3) as NO3		11	33.64	0.15	33.48	33.93	33.01	31.36	34.66	3.58	0.258
CRM	QCP3	IONS_IC	Nitrogen, ammonium (NH4) as NH4		11	33.12	0.08	32.99	33.22	33.63	31.95	35.31	6.61	0.04
CRM	QCP3	IONS_IC	Potassium		11	13.58	0.02	13.54	13.62	13.95	12.93	14.97	14.47	0.092
CRM	QCP3	IONS_IC	Sodium		11	26.50	0.05	26.45	26.60	25.97	24.67	27.27	8.86	0.091

Lab QC Type	Lab QC Name	NPSTORET Procedure ID	EPA STORET Name	Lab Statistic Name	n	Mean	Std Dev	Min	Max	Lab Target Value	Lab Target LSL	Lab Target USL	C_p	Lower Quant Limit
CRM	QCP3	IONS_IC	Sulfur, sulfate (SO4) as SO4		11	103.98	0.29	103.70	104.64	102.60	97.47	107.73	5.81	0.986
LAB	ALCALQCCS	AL_TOT_TCON	Aluminum, Organic + Inorganic Monomeric (reactive aluminum)		5	51.96	2.07	49.59	53.99	50.00	40.00	60.00	1.61	4.845
LAB	ALDETQCCS	AL_TOT_TCON	Aluminum, Organic + Inorganic Monomeric (reactive aluminum)		2	41.73	0.57	41.33	42.14	40.00	30.00	50.00	5.83	4.845
LAB	ANION_MIDSTD	IONS_IC	Chloride		170	34.14	0.17	33.72	34.77	33.84	32.15	35.53	3.29	0.242
LAB	ANION_MIDSTD	IONS_IC	Nitrogen, Nitrate (NO3) as NO3		170	38.85	0.17	38.47	39.43	38.64	36.71	40.57	3.81	0.258
LAB	ANION_MIDSTD	IONS_IC	Sulfur, sulfate (SO4) as SO4		170	125.40	0.44	124.24	127.07	124.80	118.56	131.04	4.69	0.986
LAB	CATION_MIDSTD	IONS_IC	Calcium		169	150.25	0.57	148.56	152.49	149.70	142.22	157.19	4.37	1.488
LAB	CATION_MIDSTD	IONS_IC	Magnesium		167	99.24	0.73	94.10	103.54	98.76	93.82	103.70	2.27	0.694
LAB	CATION_MIDSTD	IONS_IC	Nitrogen, ammonium (NH4) as NH4		167	16.70	0.14	16.08	17.44	16.62	15.51	17.73	2.64	0.04
LAB	CATION_MIDSTD	IONS_IC	Potassium		169	46.29	0.23	45.01	47.27	46.08	43.78	48.38	3.31	0.092
LAB	CATION_MIDSTD	IONS_IC	Sodium		169	52.38	0.18	51.73	53.10	52.20	49.59	54.81	4.86	0.091
LAB	DIW	ANC_PH_AUTOTITR	Not Applicable	ANC Titration R-squared	94	1.00	0.00	1.00	1.00	.	.	.	.	.
LAB	DIW	ANC_PH_AUTOTITR	Not Applicable	ANC Titration slope	94	0.01	0.00	0.01	0.01	.	.	.	.	.
LAB	PH 4.60 QCS	ANC_PH_AUTOTITR	Not Applicable	ANC Titration R-squared	568	1.00	0.00	1.00	1.00	.	.	.	.	.

Lab QC Type	Lab QC Name	NPSTORET Procedure ID	EPA STORET Name	Lab Statistic Name	n	Mean	Std Dev	Min	Max	Lab Target Value	Lab Target LSL	Lab Target USL	C_p	Lower Quant Limit
LAB	PH 4.60 QCS	ANC_PH_AUTOTITR	Not Applicable	ANC Titration slope	568	0.01	0.00	0.01	0.01	.	.	.	.	.
LAB	SILICA_MIDSTD	SILICA_TCON	Silica		28	106.46	0.63	105.68	109.14	106.57	101.24	111.90	2.80	3.342
STATISTIC	Titrator		Not Applicable	ANC Titration R-squared	1	1.00	.	1.00	1.00	.	.	.	.	.
STATISTIC	Titrator		Not Applicable	ANC Titration slope	1	0.01	.	0.01	0.01	.	.	.	.	.
STATISTIC	Titrator	ANC_PH_AUTOTITR	Not Applicable	ANC Titration R-squared	1044	1.00	0.00	1.00	1.00	.	.	.	.	.
STATISTIC	Titrator	ANC_PH_AUTOTITR	Not Applicable	ANC Titration slope	1044	0.01	0.00	0.01	0.01	.	.	.	.	.
SWAS NATURAL MA	NFDR 03/09/2005	ANC_PH_AUTOTITR	Not Applicable	ANC Titration R-squared	24	1.00	0.00	1.00	1.00	.	.	.	.	.
SWAS NATURAL MA	NFDR 03/09/2005	ANC_PH_AUTOTITR	Not Applicable	ANC Titration slope	24	0.01	0.00	0.01	0.01	.	.	.	.	.
SWAS NATURAL MA	NFDR 06/06/2007	ANC_PH_AUTOTITR	Not Applicable	ANC Titration R-squared	53	1.00	0.00	1.00	1.00	.	.	.	.	.
SWAS NATURAL MA	NFDR 06/06/2007	ANC_PH_AUTOTITR	Not Applicable	ANC Titration slope	53	0.01	0.00	0.01	0.01	.	.	.	.	.
SWAS NATURAL MA	PAIN 05/29/2007	ANC_PH_AUTOTITR	Not Applicable	ANC Titration R-squared	54	1.00	0.00	1.00	1.00	.	.	.	.	.

Lab QC Type	Lab QC Name	NPSTORET Procedure ID	EPA STORET Name	Lab Statistic Name	n	Mean	Std Dev	Min	Max	Lab Target Value	Lab Target LSL	Lab Target USL	C_p	Lower Quant Limit
SWAS NATURAL MA	PAIN 05/29/2007	ANC_PH_AUTOTITR	Not Applicable	ANC Titration slope	54	0.01	0.00	0.01	0.01	.	.	.	.	.
SWAS NATURAL MA	PAIN 12/06/2005	ANC_PH_AUTOTITR	Not Applicable	ANC Titration R-squared	24	1.00	0.00	1.00	1.00	.	.	.	.	.
SWAS NATURAL MA	PAIN 12/06/2005	ANC_PH_AUTOTITR	Not Applicable	ANC Titration slope	24	0.01	0.00	0.01	0.01	.	.	.	.	.

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: GRAYSON **Station ID:** BW01 **Visit Date:** 1/9/2007 11:35 AM EST
Visit Comment: FORREST R. ATWOOD
// //Snow, mid 20's
Rain; flood watch 2 days before sample date, above normal temps.

Activity: 070109113501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Manual_Grab	5.39	Detected and Quantified	F	Actual				1/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Manual_Grab	-1.38591 µeq/L	Detected and Quantified	F	Actual				1/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	12.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/17/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	27.53891 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	9.90065 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	33.58009 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	9.3429 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	102.505 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		1/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	11.04567 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	50.5235 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	8.64289 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
T_AL_TC_Grab	76.101 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

O_AL_TC_Grab	72.425 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l			7/23/2007		
Dilution: N	*Recovery:* N	*Correction:* N									
SAA_2PT_IC2_GRAB	68.82615 µeq/L	Detected and Quantified	F	Actual					2/18/2008		
Dilution: N	*Recovery:* N	*Correction:* N									

Activity: 07010911350F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	2.8 °C	Detected and Quantified	F	Actual				1/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: GRAYSON **Station ID:** BW06 **Visit Date:** 1/9/2007 3:10 PM EST
Visit Comment: FORREST R. ATWOOD
// //Snow, mid 20's
Rain 2 days prior, flood watch, above normal temps.

Activity: 070109151001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Manual_Grab	6.43	Detected and Quantified	F	Actual				1/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Manual_Grab	22.8731 µeq/L	Detected and Quantified	F	Actual				1/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	12.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/17/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	35.21307 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	17.7463 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	47.20636 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_Grab	9.91411 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		2/15/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SiO2_TC_Grab	116.598 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		1/24/2007
Dilution: N	*Recovery:* N	*Correction:* N						
NO3_Ions_Grab	11.05682 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		2/15/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	49.61251 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		2/15/2007
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	12.09926 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		2/15/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_2PT_IC2_GRAB	95.64169 µeq/L	Detected and Quantified	F	Actual				2/18/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 07010915100F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	3.7 °C	Detected and Quantified	F	Actual				1/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds

Project ID: GRAYSON **Station ID:** CC02 **Visit Date:** 1/9/2007 1:05 PM EST

Visit Comment: FORREST R. ATWOOD
// //Snow, mid 20's
Rain 2 days prior, flood watch, above normal temps.

Activity: 070109130501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Manual_Grab	6.07	Detected and Quantified	F	Actual				1/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Manual_Grab	10.37445 µeq/L	Detected and Quantified	F	Actual				1/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	15.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	1/17/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_Grab	48.57477 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	2/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	15.97433 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	2/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	42.72973 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	2/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	9.73353 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	2/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	105.974 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	1/24/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	25.49571 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	2/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	60.19092 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	2/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	11.24551 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	2/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_2PT_IC2_GRAB	107.30659 µeq/L	Detected and Quantified	F	Actual			2/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07010913050F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	2.7 °C	Detected and Quantified	F	Actual				1/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

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Organization: University of Virginia non-NPS watersheds
Project ID: GRAYSON **Station ID:** MC01 **Visit Date:** 1/9/2007 2:45 PM EST
Visit Comment: FORREST R. ATWOOD
// //Snow, mid 20's
Rain 2 days prior, flood watch, above normal temps.

Activity: 070109144501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Manual_Grab	6.68	Detected and Quantified	F	Actual				1/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Manual_Grab	71.71418 µeq/L	Detected and Quantified	F	Actual				1/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	26.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/17/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	109.33478 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	48.74181 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	71.42586 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	11.46254 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	133.663 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		1/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	56.93996 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	48.89392 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	37.9952 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_2PT_IC2_GRAB	215.54326 µeq/L	Detected and Quantified	F	Actual				2/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Activity: 070109144501 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Manual_Grab	6.73	Detected and Quantified	F	Actual				1/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Manual_Grab	76.89435 µeq/L	Detected and Quantified	F	Actual				1/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	26.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/17/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	109.47576 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	48.796 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	71.38591 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	11.46209 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	134.045 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		1/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	57.75368 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	48.87445 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	38.04936 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_2PT_IC2_GRAB	221.57184 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07010914450F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	4.9 °C	Detected and Quantified	F	Actual				1/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: GRAYSON **Station ID:** QB01 **Visit Date:** 1/9/2007 11:20 AM EST
Visit Comment: FORREST R. ATWOOD
//
Rain 2 days prior, flood watch, above normal temps. //Snow, mid 20's

Activity: 070109112001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Manual_Grab	6.34	Detected and Quantified	F	Actual				1/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Manual_Grab	20.31484 µeq/L	Detected and Quantified	F	Actual				1/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	12.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/17/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	38.29835 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	16.76454 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	39.69395 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	9.49623 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	111.187 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		1/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	14.37852 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		2/15/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	49.55538 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		2/15/2007
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	9.33658 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		2/15/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_2PT_IC2_GRAB	93.58532 µeq/L	Detected and Quantified	F	Actual				2/18/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 07010911200F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	3.8 °C	Detected and Quantified	F	Actual				1/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: GRAYSON **Station ID:** WB01 **Visit Date:** 1/9/2007 10:45 AM EST
Visit Comment: FORREST R. ATWOOD
// //Snow, mid 20's
Rain 2 days prior, flood watch, above normal temps.

Activity: 070109104501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Manual_Grab	6.54	Detected and Quantified	F	Actual				1/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Manual_Grab	29.39942 µeq/L	Detected and Quantified	F	Actual				1/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/17/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	43.97585 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	24.7559 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	2/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	60.35782 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	2/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	11.54489 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	2/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	123.753 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	1/24/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	19.9269 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	2/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	51.93182 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	2/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	23.90296 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	2/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_2PT_IC2_GRAB	125.1611 µeq/L	Detected and Quantified	F	Actual			2/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07010910450F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	4.9 °C	Detected and Quantified	F	Actual				1/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: NONE **Station ID:** MAR1 **Visit Date:** 3/8/2007 12:00 PM EST
Visit Comment: RICK WEBB
// //

Activity: 070308120001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7706	Detected and Quantified	F	Actual				3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	7.11969 µeq/L	Detected and Quantified	F	Actual			3/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	8.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	3/15/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_Grab	18.43114 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	19.17173 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	10.88448 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	8.07564 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	58.681 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	34.09755 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	13.30444 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	9.736 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	56.56949 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	54.56218 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96452	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: University of Virginia non-NPS watersheds
Project ID: NONE **Station ID:** MAR2 **Visit Date:** 3/8/2007 12:12 PM EST
Visit Comment: RICK WEBB
// //

Activity: 070308121201 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0434	Detected and Quantified	F	Actual				3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	14.83208 µeq/L	Detected and Quantified	F	Actual				3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	11 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	30.93442 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	30.63467 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	11.38846 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.49865 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	62.35 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	6.64901 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	38.14974 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	13.81519 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	83.4627 µeq/L	Detected and Quantified	F	Actual				2/6/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
SAA_MET_IC2_GRAB	73.44602 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.87999	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: University of Virginia non-NPS watersheds
Project ID: NONE **Station ID:** PAN1 **Visit Date:** 3/8/2007 2:44 PM EST
Visit Comment: RICK WEBB
// //

Activity: 070308144401 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.3444	Detected and Quantified	F	Actual				3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	2.40855 µeq/L	Detected and Quantified	F	Actual				3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	10.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	8.57525 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	26.53451 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	12.92886 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	14.5035 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	63.893 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	0.23995 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	2.22662 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	44.12309 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	14.49774 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	24.459 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	62.78207 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	63.256 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	1.00755	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: NONE **Station ID:** PAN2 **Visit Date:** 3/8/2007 3:05 PM EST

Visit Comment: RICK WEBB

// //

Activity: 070308150501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8879	Detected and Quantified	F	Actual				3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	98.17682 µeq/L	Detected and Quantified	F	Actual				3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										

Ca_Ions_Grab	78.59237 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	66.20938 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	12.40986 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	12.0207 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	61.37 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	11.89036 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	41.79706 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	14.51672 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	169.23881 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	166.38096 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.98311	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: NONE **Station ID:** SK01 **Visit Date:** 2/3/2007 10:30 AM EST
Visit Comment: RICK WEBB
//
Very cold, light snow //Very cold, light snow

Activity: 070203103001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2922	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	85.28068 µeq/L	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	28.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/6/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	110.68969 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	102.01753 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	24.52282 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	15.34709 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	84.179 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	131.57449 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	14.2371 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	252.58363 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	231.13277 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.91507	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07020310300F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	1 °C	Detected and Quantified	F	Actual				2/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: NONE **Station ID:** SK01 **Visit Date:** 5/6/2007 4:45 PM EDT

Activity: 070506164501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	1 days	Detected and Quantified	F	Actual								

Activity: 070506164502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.876	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	101.57247 µeq/L	Detected and Quantified	F	Actual								

Cond_VWR_Manual_Grab	31.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	5/8/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	118.21296 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	104.46788 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	26.73144 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	19.88556 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	87.30727 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.56329 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	134.67275 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	14.37263 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	269.86113 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	250.65835 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.92884	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: NONE **Station ID:** SK01 **Visit Date:** 8/18/2007 5:00 PM EDT

Activity: 070818170001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	16.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	INTERSTITIAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070818170002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5141	Detected and Quantified	F	Actual				8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	191.51397 µeq/L	Detected and Quantified	F	Actual				8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	30 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	146.99798 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	127.28866 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	26.38623 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	23.38338 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	110.92486 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NO3_Ions_Grab	14.73202 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	92.18354 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	13.96993 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	324.06275 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	312.39946 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.96401	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Organization: University of Virginia non-NPS watersheds
Project ID: NONE **Station ID:** SK01 **Visit Date:** 11/4/2007 4:15 PM EST

Activity: 071104161501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	INTERSTITIAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071104161502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2597	Detected and Quantified	F	Actual				11/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	130.96286 µeq/L	Detected and Quantified	F	Actual			11/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	29.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	11/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	133.87067 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	119.12945 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	28.40861 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	19.66663 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	100.32308 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	2.20503 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	11.0847 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	132.1475 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	17.24819 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	303.28039 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	291.44325 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96097	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: NONE **Station ID:** SK02 **Visit Date:** 2/3/2007 11:00 AM EST
Visit Comment: RICK WEBB
//
Very cold, light snow //Very cold, light snow

Activity: 070203110001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4778	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	145.80133 µeq/L	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	32 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/6/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	165.11671 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	89.33749 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	20.74639 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	14.08982 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	80.958 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	3.26945 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	109.92559 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	14.29714 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	289.29691 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	273.29351 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.94468	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07020311000F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	1 °C	Detected and Quantified	F	Actual				2/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: NONE **Station ID:** SK02 **Visit Date:** 5/6/2007 5:15 PM EDT

Activity: 070506171501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	1 days	Detected and Quantified	F	Actual								

Activity: 070506171502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.0345	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	169.04618 µeq/L	Detected and Quantified	F	Actual								

Cond_VWR_Manual_Grab	35.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	5/8/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	190.10397 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	87.84878 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	22.87137 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	19.25166 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	85.36113 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.45517 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	115.97109 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	14.13751 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	320.53095 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	299.19528 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93344	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: University of Virginia non-NPS watersheds
Project ID: NONE **Station ID:** SK02 **Visit Date:** 8/18/2007 5:30 PM EDT

Activity: 070818173001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	INTERSTITIAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070818173002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8346	Detected and Quantified	F	Actual				8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	349.64348 µeq/L	Detected and Quantified	F	Actual				8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	39.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	270.50698 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	130.06108 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	23.18465 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	25.30047 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	108.80251 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	0.24708 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	4.57433 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	69.196 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	13.18932 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	449.30026 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	436.60313 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97174	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: NONE **Station ID:** SK02 **Visit Date:** 11/4/2007 5:00 PM EST

Activity: 071104170001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071104170002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.0773	Detected and Quantified	F	Actual				11/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	245.40313 µeq/L	Detected and Quantified	F	Actual			11/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	34.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	11/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	216.30568 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	109.92599 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	25.92936 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	22.51595 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	96.65964 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.82132 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	97.69884 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.952 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	374.68348 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	366.87529 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97916	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP1812 **Visit Date:** 10/12/2007 1:11 PM EDT

Activity: 071012131101 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7366	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	672.5185 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	78.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	345.8994 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	140.34936 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	132.40567 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	52.85835 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	217.91807 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	199.83457 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		4/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	4.78342 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	104.08586 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	47.43095 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	871.34735 µeq/L	Detected and Quantified	F	Actual				12/1/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	828.81873 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.95119	Detected and Quantified	F	Actual				12/1/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Activity: 071012131101 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7106	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	678.35778 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	79 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	345.86134 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	140.79432 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	132.46971 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	53.82027 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	222.59958 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	186.61264 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		4/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	5.97828 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	103.77092 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	47.58997 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	859.55828 µeq/L	Detected and Quantified	F	Actual		12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N				
SAA_MET_IC2_GRAB	835.69695 µeq/L	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				
IONRATIO_MET_IC2_GRAB	0.97224	Detected and Quantified	F	Actual		12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N				

Activity: 071012131103 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071012131103 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071012131105 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No
Activity Comment: pH 6.63; EC 90

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	*Not Reported	*Not Reported	F	Actual								
flow_streamStage	*Not Reported	*Not Reported	F	Actual								

NPSTORET Results with Comments

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Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP1858 **Visit Date:** 10/4/2007 3:22 PM EDT

Activity: 071004152201 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.8944	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	63.09299 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	21.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	80.87551 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	43.32519 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	55.14504 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	18.1548 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	124.09689 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.61759 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	99.38204 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	4.02575 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	24.19618 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	198.11813 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	190.69696 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.96254	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Activity: 071004152201 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.841	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	66.02345 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	20.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	79.56633 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	43.10187 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	55.14275 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	18.15524 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	123.90443 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.21093 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	102.31308 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	4.09235 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	24.3104 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	196.17712 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	196.73928 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	1.00287	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 071004152203 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	5.35361 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		9/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071004152203 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	5.55212 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		9/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071004152205 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP1864 **Visit Date:** 10/3/2007 8:48 AM EDT

Activity: 071003084801 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4242	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	197.57841 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	29 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	137.31513 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	94.22775 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	71.3901 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	5.10437 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	178.2524 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	55.5716 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	17.82413 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	26.07121 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	308.04385 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	297.04535 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.9643	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 071003084802 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071003084803 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	*Not Reported	*Not Reported	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP1865 **Visit Date:** 10/9/2007 12:15 PM EDT

Activity: 071009121501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5265	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	182.00619 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	23.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	104.59077 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	55.30989 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	91.44467 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/15/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
K_Ions_Grab	10.78417 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	233.14487 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.38404 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	34.45614 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	10.40743 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	27.68548 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	262.51354 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	254.55524 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96968	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071009121502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071009121503 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.0 °C	Detected and Quantified	F	Actual								

weather	0	Detected and Quantified	F	Actual
water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	NORMAL	Detected and Quantified	F	Actual

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP1870 **Visit Date:** 10/2/2007 4:50 PM EDT

Activity: 071002165001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9137	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	278.12091 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	46 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	263.04495 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	146.42451 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	77.84236 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	5.86103 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	154.56468 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	3.07878 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	25.97759 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	52.80711 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Cl_Ions_Grab	120.41557 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/10/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	496.25163 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	477.32118 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96185	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071002165001 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Rick Webb **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7133	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	284.44534 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	46.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	263.41219 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	146.34189 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	77.71684 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	5.89583 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	154.95209 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.21299 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	27.18871 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	53.02178 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	121.3895 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/10/2008
Dilution: Y	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	493.57974 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	486.04533 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.98474	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 071002165003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071002165003 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Rick Webb **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071002165005 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	*Not Reported	*Not Reported	F	Actual								

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP1876 **Visit Date:** 10/1/2007 3:23 PM EDT

Activity: 071001152301 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0832	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	54.83278 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	10.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	32.70501 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	14.80473 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	45.21751 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.22705 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	105.03615 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.30794 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	5.62033 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	14.65679 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	18.85792 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	100.26224 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	93.96782 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.93722	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Activity: 071001152302 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071001152303 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	*Not Reported	*Not Reported	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP1883 **Visit Date:** 10/5/2007 9:39 AM EDT

Activity: 071005093901 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0858	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	178.45982 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	26.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	112.12876 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	61.75229 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	86.02685 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	18.82731 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	220.672 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	4.46544 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	56.66487 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	13.9713 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	31.0611 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	283.20065 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	280.15709 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.98925	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071005093902 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071005093903 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP1884 **Visit Date:** 10/3/2007 10:58 AM EDT

Activity: 071003105801 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.403	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	242.22992 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	48.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	226.26317 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	163.36452 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	115.23366 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	4.19121 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	252.35698 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	159.69825 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		4/10/2008
Dilution: Y	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	69.49965 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	21.02014 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	509.05906 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	492.44796 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.96737	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 071003105801 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.384	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	255.38866 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	48.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	226.61203 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	163.11452 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	115.53202 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	4.36867 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	252.35698 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	0.40509 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	156.92708 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	4/10/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	69.84229 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.11569 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	510.03233 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	503.27372 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.98675	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071003105803 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071003105803 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071003105805 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								

water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	LOW	Detected and Quantified	F	Actual

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP1886 **Visit Date:** 10/2/2007 9:59 AM EDT

Activity: 071002095901 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2177	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	79.98402 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	25 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	111.52638 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	41.34828 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	78.68929 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.69803 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	102.54418 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	3.55433 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	31.20368 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	42.4493 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	77.28159 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/9/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	245.81631 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
SAA_MET_IC2_GRAB	230.91859 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.93939	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Activity: 071002095902 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071002095903 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP1912 **Visit Date:** 10/12/2007 2:39 PM EDT

Activity: 071012143901 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2711	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	104.41867 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	15.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	68.49434 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	31.17429 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	52.96569 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	9.71394 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	152.22893 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	6.56023 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	36.46602 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	4.48286 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	15.87282 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	168.90849 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	161.24037 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9546	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071012143902 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071012143903 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP196 **Visit Date:** 10/3/2007 11:26 AM EDT

Activity: 071003112601 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8834	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	518.89121 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	64.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	252.34656 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	275.0593 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	203.3718 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.2301 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	293.485 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	128.48572 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		4/10/2008
Dilution: Y	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	38.22114 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	27.73775 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	737.01426 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	713.33582 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.96787	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 071003112602 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071003112603 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	*Not Reported	*Not Reported	F	Actual								

NPSTORET Results with Comments

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Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP3001 **Visit Date:** 10/5/2007 12:01 PM EDT

Activity: 071005120101 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5319	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	596.23812 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	56.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	319.91385 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	192.66808 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	109.00136 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	44.0663 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	321.92008 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	23.348 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	0.79404 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	9.78142 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	37.62319 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	688.99759 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	644.43677 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.93533	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Activity: 071005120101 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5439	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	596.34586 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	56.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	319.5634 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	191.92972 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	108.75028 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	43.94715 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	322.31023 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	12.65919 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	0.89251 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	9.6968 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	37.47972 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	676.84974 µeq/L	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				
SAA_MET_IC2_GRAB	644.41489 µeq/L	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				
IONRATIO_MET_IC2_GRAB	0.95208	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				

Activity: 071005120103 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071005120103 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071005120105 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11.0 °C	Detected and Quantified	F	Actual								
weather	*Not Reported	*Not Reported	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

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Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP3004 **Visit Date:** 10/1/2007 4:03 PM EDT

Activity: 071001160301 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.366	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	93.04182 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	15.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	63.45526 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	36.46616 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	54.46503 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.99485 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	143.7296 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	1.89207 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	6.14247 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	19.65987 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	30.37524 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	164.27337 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	149.2194 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.90836	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 071001160302 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071001160303 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10.0 °C	Detected and Quantified	F	Actual								
weather	*Not Reported	*Not Reported	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	*Not Reported	*Not Reported	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP3008 **Visit Date:** 10/15/2007 12:13 PM EDT

Activity: 071015121301 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7207	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	469.07241 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	54.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	222.62505 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	215.94283 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	151.69118 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/10/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
K_Ions_Grab	7.68712 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	363.76097 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	18.09787 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	2.19236 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	89.9232 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	29.6623 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	616.04405 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	590.85027 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9591	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071015121302 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071015121303 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.0 °C	Detected and Quantified	F	Actual								

weather	*Not Reported	*Not Reported	F	Actual
water_turbidity	*Not Reported	*Not Reported	F	Actual
flow_streamStage	*Not Reported	*Not Reported	F	Actual

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP3009 **Visit Date:** 10/9/2007 3:25 PM EDT

Activity: 071009152501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0964	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	74.78863 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	11.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	35.92661 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	19.94401 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	45.46798 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	11.55218 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	122.74979 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.4907 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	13.5528 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	4.16389 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Cl_Ions_Grab	21.81465 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	113.38148 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	114.31997 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	1.00828	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 071009152501 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0687	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	77.02813 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	11.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	35.09749 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	19.71239 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	45.20328 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	11.48596 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	122.67113 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	3.83339 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	10.8051 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	4.23507 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	21.84839 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	115.33251 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	113.91669 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.98772	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 071009152503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071009152503 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071009152505 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	*Not Reported	*Not Reported	F	Actual								
water_turbidity	*Not Reported	*Not Reported	F	Actual								
flow_streamStage	*Not Reported	*Not Reported	F	Actual								

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP3011 **Visit Date:** 10/4/2007 5:01 PM EDT

Activity: 071004170101 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0674	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	83.63661 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	18.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	58.99005 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	26.12258 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	75.14477 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	15.00025 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	157.10324 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	20.6873 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	4.27418 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	74.73512 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	18.96114 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	195.94495 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	181.60705 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.92683	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Activity: 071004170102 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071004170103 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NO FLOW	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP3013 **Visit Date:** 10/16/2007 9:32 AM EDT

Activity: 071016093201 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Mary Mandt **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2125	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	191.24126 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	29.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	160.88678 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	51.7298 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	64.76759 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	13.39715 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	149.69374 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	2.93385 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	30.01785 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	23.55697 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	39.22306 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	293.71517 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	284.03914 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96706	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071016093201 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2182	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	188.5162 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	29 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	160.97734 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	51.68449 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	64.71282 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	13.46123 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	148.91394 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	11.07006 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	28.36273 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	23.69744 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	39.22306 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	301.90594 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	279.79943 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.92678	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071016093203 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071016093203 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071016093205 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP3014 **Visit Date:** 10/2/2007 3:56 PM EDT

Activity: 071002155601 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.328	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	170.78649 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	25.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	129.36165 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	87.09157 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	45.25741 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_Grab	3.26626 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	122.70839 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.76482 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	8.05192 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	74.88118 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/9/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	264.98339 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	254.48441 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96038	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071002155602 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071002155603 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								

flow_streamStage	LOW	Detected and Quantified	F	Actual

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP3019 **Visit Date:** 10/2/2007 1:30 PM EDT

Activity: 071002133001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6029	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	110.00383 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	25 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	109.37097 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	83.63718 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	56.83986 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.47404 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	151.07937 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	3.02072 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	104.67439 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		4/9/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	8.44862 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	22.5733 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	259.34277 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	245.70014 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.9474	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 071002133002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071002133003 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No
Activity Comment: Difficult to sample, some sediment in sample.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP3023 **Visit Date:** 10/3/2007 3:28 PM EDT

Activity: 071003152801 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	4.2447	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	-57.98245 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	69.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	61.10374 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	60.83512 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	18.93361 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	177.85709 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/10/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	400.7828 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.20033 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.79787 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	473.14855 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/10/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	16.14469 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	318.92989 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	432.10866 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	1.35487	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071003152802 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	288.99681 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		9/23/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												

O_AL_TC_Grab	15.13753 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	11/5/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual			

Activity: 071003152803 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No
Activity Comment: Lots of iron (orange) floc on bed

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP3024 **Visit Date:** 10/10/2007 10:38 AM EDT
Visit Comment: Marked spring is plunge pool swimming hole with large inflow - sampled pool.

Activity: 071010103801 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.8944	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	16.75419 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	9.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	16.32287 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	22.73292 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	20.58759 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_Grab	25.07943 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	126.79204 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.79931 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	47.28969 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	20.48402 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	84.72931 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	85.32721 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	1.00706	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071010103802 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	13.53762 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		9/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071010103803 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP3025 **Visit Date:** 10/11/2007 11:21 AM EDT

Activity: 071011112101 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.4124	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	21.77047 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	17.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	34.27182 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	39.0381 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	23.36036 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	47.97853 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	105.63598 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.32905 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	8.80288 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	89.96752 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	23.51543 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	144.97786 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	144.0563 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.99364	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071011112102 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	6.73487 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		9/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071011112103 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No
Activity Comment: pH 5.36; EC 20

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	INTERSTITIAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

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Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP39 **Visit Date:** 10/1/2007 4:47 PM EDT

Activity: 071001164701 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.719	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	373.21804 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	44.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	244.16364 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	153.84214 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	92.85609 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/9/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.88997 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	269.79366 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	54.46825 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	20.63095 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	27.7224 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	497.75834 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	476.03964 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.95637	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Activity: 071001164701 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Rick Webb **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.639	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	373.501 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	44.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	244.96726 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	153.87368 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	93.02328 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/9/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.88218 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	272.50912 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.238 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	57.91446 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	20.54433 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	27.80417 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	498.9844 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	479.76396 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.96148	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 071001164703 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071001164703 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Rick Webb **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071001164705 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11.0 °C	Detected and Quantified	F	Actual								
weather	*Not Reported	*Not Reported	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	*Not Reported	*Not Reported	F	Actual								

NPSTORET Results with Comments

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Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP4001 **Visit Date:** 10/1/2007 6:33 PM EDT

Activity: 071001183301 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Craig Snyder **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.4678	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	456.07836 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	53.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	309.03285 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/9/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	209.05799 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/9/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	82.84525 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	5.04826 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	224.91579 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.30297 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	16.87195 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	38.04411 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	66.74593 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/9/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	606.28732 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	577.74035 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.95292	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Activity: 071001183302 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Craig Snyder **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071001183303 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Craig Snyder **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	*Not Reported	*Not Reported	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	*Not Reported	*Not Reported	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP4002 **Visit Date:** 10/4/2007 9:58 AM EDT

Activity: 071004095801 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.3586	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	142.63605 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	19 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	73.235 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	32.12054 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	82.12066 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	13.54888 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	200.2535 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.98531 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	13.21447 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	13.8207 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	29.66931 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	202.01039 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	199.34053 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.98678	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071004095802 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	F	Actual								

Activity: 071004095803 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No
Activity Comment: Field: pH 5.89, ec 20

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	INTERSTITIAL	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP4003B **Visit Date:** 10/10/2007 11:53 AM EDT
Visit Comment: 397m downstream of SP4003

Activity: 071010115301 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	4.6954	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	-13.01954 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	13.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	8.53311 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	19.76605 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	21.11726 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	3.58458 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	114.48173 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NO3_Ions_Grab	0.79055 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	60.85929 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	22.01766 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	53.0075 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	70.64796 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	1.33279	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 071010115302 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	134.35697 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		9/23/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
O_AL_TC_Grab	12.35203 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		11/5/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071010115303 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	*Not Reported	*Not Reported	F	Actual								

water_turbidity	*Not Reported	*Not Reported	F	Actual
flow_streamStage	*Not Reported	*Not Reported	F	Actual

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP4004 **Visit Date:** 10/10/2007 7:12 PM EDT

Activity: 071010191201 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.6745	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	33.64833 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	18 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	38.1008 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	34.89711 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	23.45599 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	61.33071 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	143.56895 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	0.79552 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	101.3442 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	23.09222 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	157.79111 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	158.88027 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	1.0069	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 071010191202 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	8.48239 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		9/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071010191203 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	*Not Reported	*Not Reported	F	Actual								
water_turbidity	*Not Reported	*Not Reported	F	Actual								
flow_streamStage	*Not Reported	*Not Reported	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP47 **Visit Date:** 10/2/2007 2:35 PM EDT

Activity: 071002143501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.543	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	134.92615 µeq/L	Detected and Quantified	F	Actual								

Cond_VWR_Manual_Grab	15.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	10/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	78.46319 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	43.10855 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	41.97515 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	4.13724 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	134.4614 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	1.36281 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	8.12504 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	4.9192 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	19.15952 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	169.04694 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	167.12991 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.98866	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071002143502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071002143503 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	*Not Reported	*Not Reported	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP50 **Visit Date:** 10/2/2007 10:40 AM EDT

Activity: 071002104001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.0243	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	183.68168 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	32.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	133.47159 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	141.71199 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	72.20709 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	4.68603 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	130.41208 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.71967 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	10.22366 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	95.46406 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	50.44489 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	352.79637 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	339.81429 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9632	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071002104002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071002104003 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP53 **Visit Date:** 10/12/2007 1:46 PM EDT

Activity: 071012134601 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6662	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	453.11323 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	59.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	309.00225 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	192.49789 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	137.37786 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	5.78625 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	288.48231 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	113.79196 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	36.45055 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	23.33334 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	644.67075 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	626.68908 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.97211	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 071012134602 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071012134603 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No
Activity Comment: pH 6.81; EC 70

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP58 **Visit Date:** 10/3/2007 9:55 AM EDT

Activity: 071003095501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.9629	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	53.73218 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	13 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	23.49523 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	40.15203 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	28.16184 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	27.654 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	104.84441 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	37.78055 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	18.8921 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	119.4696 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	110.44533 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.92446	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071003095502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	9.05787 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		9/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												

DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual									

Activity: 071003095503 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP62 **Visit Date:** 10/3/2007 1:50 PM EDT

Activity: 071003135001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0638	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	20.38012 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	12.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	23.29906 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	27.20598 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	19.37756 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	39.12696 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	87.81048 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	5.28642 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	2.1214 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	58.21673 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	18.21079 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	114.29598 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	98.92904 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.86555	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071003135002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071003135003 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Rick Webb **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SP8 **Visit Date:** 10/10/2007 1:53 PM EDT

Activity: 071010135301 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.8265	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	30.16634 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	6.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	10.47185 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	13.27077 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	22.70484 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	8.72478 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	121.78777 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	5.55383 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	22.24733 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	55.17874 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	58.008 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	1.05127	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Activity: 071010135301 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7557	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	30.33445 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	6.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	11.47498 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	13.78884 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	23.16257 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	8.96935 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	121.98016 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	0.79226 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	5.65783 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	22.64982 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	57.40224 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	59.43436 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	1.0354	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 071010135303 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	28.04347 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		9/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071010135303 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	29.10066 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		9/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071010135305 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	16.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	INTERSTITIAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW148 **Visit Date:** 5/25/2007 11:30 AM EDT

Activity: 070525113001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070525113002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.0784	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	498.03521 µeq/L	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	55 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	263.09839 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/3/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	226.7792 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/3/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	128.18733 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/3/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	11.49808 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	354.61559 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	53.92659 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	43.16363 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	629.5695 µeq/L	Detected and Quantified	F	Actual				3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	595.16593 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.94535	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 070525113002 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.0449	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	502.62016 µeq/L	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	54.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	263.12669 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/3/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	226.88693 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/3/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	127.9033 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/3/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	11.44444 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	352.31358 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	2.31274 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	53.45097 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	42.87407 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	631.6741 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	598.9857 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94825	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SOURCH2O **Station ID:** SW148 **Visit Date:** 11/2/2007 2:40 PM EDT

Visit Comment: 75% of reach has flow

Activity: 071102144001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.0353	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	520.82423 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	61.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	294.77213 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	4/25/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	250.84298 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/25/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	127.22652 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/25/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
K_Ions_Grab	18.96118 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	342.20272 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/23/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	95.81329 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	59.48191 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/25/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	691.80931 µeq/L	Detected and Quantified	F	Actual			12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	676.15993 µeq/L	Detected and Quantified	F	Actual			12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97738	Detected and Quantified	F	Actual			12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071102144002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

NPSTORET Results with Comments

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Activity: 071102144003 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10.1 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW152 **Visit Date:** 6/4/2007 12:00 PM EDT

Activity: 070604120001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070604120002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.642	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	100.34981 µeq/L	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	26.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	88.22344 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	55.636 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	107.82239 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/4/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
K_Ions_Grab	11.75592 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	221.14001 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.52039 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	116.8106 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.23263 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	263.95814 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	239.43354 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.90709	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SOURCH2O **Station ID:** SW152 **Visit Date:** 10/20/2007 2:45 PM EDT

Visit Comment: 30% of reach has SF. Very low. Sample from stagnant pool because flowing channel is not deep enough.

Activity: 071020144501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4643	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	167.28094 µeq/L	Detected and Quantified	F	Actual								

Cond_VWR_Manual_Grab	30.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	10/23/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	102.60825 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	64.31263 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	126.56265 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/15/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
K_Ions_Grab	13.40422 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	275.88405 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	2.97352 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	99.59678 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	29.40187 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	309.86127 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	296.32009 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9563	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071020144502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071020144503 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	INTERSTITIAL	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW161 **Visit Date:** 6/4/2007 4:40 PM EDT

Activity: 070604164001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070604164002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.2952	Detected and Quantified	F	Actual				6/7/2007				

Dilution: N *Recovery:* N *Correction:* N

ANC_Metrohm_Grab	382.78346 µeq/L	Detected and Quantified	F	Actual			6/7/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	50.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	6/7/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	248.53884 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	180.12389 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/4/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	129.68532 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/4/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
K_Ions_Grab	6.39019 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	308.6091 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.35022 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	1.64193 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	109.11549 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	26.89642 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	565.08846 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	520.4373 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.92098	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Activity: 070604164002 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.2721	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	382.89467 µeq/L	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	51.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	247.37142 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	178.48492 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/4/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	129.30217 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/4/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.51029 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	308.6091 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	1.38746 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	108.97291 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	26.91365 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	561.6753 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	520.16869 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.9261	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW161 **Visit Date:** 11/2/2007 11:30 AM EDT
Visit Comment: 80% surface flow

Activity: 071102113001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.1168	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	506.4218 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	59.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	290.18351 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	217.11639 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	148.56071 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.77509 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	337.8953 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/23/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	108.86379 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Cl_Ions_Grab	42.10462 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	663.6422 µeq/L	Detected and Quantified	F	Actual			12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	657.43071 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.99064	Detected and Quantified	F	Actual			12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071102113002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071102113003 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW165 **Visit Date:** 5/30/2007 11:30 AM EDT

Activity: 070530113001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	16.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								

water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	NORMAL	Detected and Quantified	F	Actual

Activity: 070530113002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.2561	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	306.83791 µeq/L	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	46.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	207.70208 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	175.35564 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/3/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	117.88058 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/3/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.76525 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	245.2562 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	4.07156 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	22.70565 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	83.9938 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	57.49648 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	512.77511 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	471.03384 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.9186	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW165 **Visit Date:** 10/20/2007 10:30 AM EDT
Visit Comment: 50% of reach has SF

Activity: 071020103001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.1886	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	434.41387 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	57.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	261.32082 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	221.02075 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	133.03991 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	12.27627 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	254.28486 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	5.63872 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	79.07892 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	80.16935 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/10/2008
Dilution: Y	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	627.66425 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	599.30086 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.95481	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 071020103001 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.1521	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	431.68165 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	57.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	264.1685 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	222.64169 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	132.93484 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	12.84633 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	252.71667 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.29397 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	12.47508 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	79.40981 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	79.95094 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/10/2008
Dilution: Y	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	632.88533 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	603.51748 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.9536	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 071020103003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071020103003 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071020103005 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW179 **Visit Date:** 5/30/2007 3:20 PM EDT

Activity: 070530152001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	16.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070530152002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8082	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	174.16943 µeq/L	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	24.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	90.34922 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	65.64517 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	99.74973 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/3/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	11.31736 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	248.14539 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	48.3392 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	24.24392 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	267.06798 µeq/L	Detected and Quantified	F	Actual				3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	246.79305 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.92408	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 070530152002 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8308	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	173.53789 µeq/L	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	24.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	89.93153 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	65.3342 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	99.69035 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/3/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	11.27675 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	248.53168 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	48.92122 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	24.42141 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	266.23933 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	246.92102 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.92744	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SOURCH2O **Station ID:** SW179 **Visit Date:** 10/28/2007 11:20 AM EDT

Visit Comment: 100% has flow. Site visited after 2.5 days steady ppt.

Activity: 071028112001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8724	Detected and Quantified	F	Actual				10/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	162.06259 µeq/L	Detected and Quantified	F	Actual				10/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	25.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	90.98955 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	66.11024 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	103.48497 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/11/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
K_Ions_Grab	13.08655 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	254.28486 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	59.09551 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	35.7777 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	273.67781 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	256.9763 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93897	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071028112002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								

flow_streamStage	LOW	Detected and Quantified	F	Actual

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW181 **Visit Date:** 5/21/2007 5:25 PM EDT

Activity: 070521172501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	*Not Reported	*Not Reported	F	Actual								

Activity: 070521172502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2843	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	39.70011 µeq/L	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	21.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	78.73989 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	46.99149 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	65.31295 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.48759 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	136.43358 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	3.84642 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	110.39514 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	25.52866 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	198.53842 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	179.47033 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.90396	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SOURCH2O **Station ID:** SW181 **Visit Date:** 10/28/2007 3:40 PM EDT

Visit Comment: 100% has surf. flow. Visit following 2.5 days steady rain (Wednesday - Fri.).

Activity: 071028154001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2868	Detected and Quantified	F	Actual				10/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	36.07396 µeq/L	Detected and Quantified	F	Actual				10/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	29 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	108.70109 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	65.76116 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	82.49123 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	10.60854 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	148.46043 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	69.97142 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	4/11/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	99.60518 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	40.61307 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	267.56852 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	246.26363 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.92038	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071028154001 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.3471	Detected and Quantified	F	Actual				10/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	35.65118 µeq/L	Detected and Quantified	F	Actual				10/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	28.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	10/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	107.64425 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	65.28883 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	81.16245 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	9.89756 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	148.65642 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	78.20628 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	4/11/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	99.64 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	39.17236 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	263.99959 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	252.66982 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95708	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071028154003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071028154003 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071028154005 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW182 **Visit Date:** 5/29/2007 2:20 PM EDT

Activity: 070529142001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070529142002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7812	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	98.42366 µeq/L	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	57.37054 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	43.55013 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	52.74725 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	12.2035 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	145.28881 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	1.92005 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	3.89221 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	13.29482 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	20.05197 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	167.79147 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	135.66266 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.80852	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 070529142002 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8194	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	96.80385 µeq/L	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	57.86753 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	43.27607 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	52.76705 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	12.15322 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	145.28881 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	1.42622 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	8.02424 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	13.0729 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	19.92019 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	167.49009 µeq/L	Detected and Quantified	F	Actual				3/19/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
SAA_MET_IC2_GRAB	137.82118 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.82286	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: Shenandoah National Park

Project ID: SOURCH2O **Station ID:** SW182 **Visit Date:** 10/19/2007 3:45 PM EDT

Visit Comment: AM off/on drizzle

Activity: 071019154501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7292	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	153.58248 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	19.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	71.51251 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	55.24767 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	64.76444 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	18.46414 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	166.68495 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	16.80603 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	27.31889 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	209.99526 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	197.7479 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.94168	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 071019154502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071019154503 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.5 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW183 **Visit Date:** 5/29/2007 9:20 AM EDT

Activity: 070529092001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070529092002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.729	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	80.14522 µeq/L	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	63.45867 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	37.74241 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	62.08076 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.68818 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	142.51191 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	19.47216 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	49.50558 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	170.97652 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	149.16346 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.87242	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SOURCH2O **Station ID:** SW183 **Visit Date:** 10/13/2007 2:30 PM EDT

Visit Comment: ~100% of reach has surface flow. GPS coordinates given are not on stream (~30m away).

Activity: 071013143001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8208	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	118.39866 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	18.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	78.18193 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	47.89002 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	66.80487 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_Grab	10.35874 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	164.33785 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	12.61097 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	58.76832 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/10/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	203.24206 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	189.81845 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93395	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071013143001 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.772	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	118.05076 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	18.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	77.58093 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	48.04715 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	67.16828 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	10.44477 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	163.75125 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	12.58524 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	58.64571 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/10/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	203.24763 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	189.32221 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93149	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071013143003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071013143003 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071013143005 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW192 **Visit Date:** 6/5/2007 11:20 AM EDT

Activity: 070605112001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	16.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070605112002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9129	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	93.61615 µeq/L	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	57.99526 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	31.99917 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	72.08942 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	11.62041 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	170.45147 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	42.94357 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	20.84057 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	173.71076 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	157.44079 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.90634	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SOURCH2O **Station ID:** SW192 **Visit Date:** 10/13/2007 10:50 AM EDT

Visit Comment: Nearly dry. Sample taken ~50m down from "top". ~10% of stream has SF. Too low for Q.

Activity: 071013105001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.3359	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	120.17418 µeq/L	Detected and Quantified	F	Actual								

Cond_VWR_Manual_Grab	26.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	10/21/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	98.49274 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	52.3031 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	101.93618 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/10/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
K_Ions_Grab	19.74277 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	187.56758 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	10.40716 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	57.37081 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	48.23704 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	39.30264 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	282.88195 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	265.08467 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93709	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071013105002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071013105003 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	MODERATE	Detected and Quantified	F	Actual								
flow_streamStage	NO FLOW	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW195 **Visit Date:** 5/23/2007 6:00 PM EDT

Activity: 070523180001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070523180002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8349	Detected and Quantified	F	Actual				5/31/2007				

Dilution: N *Recovery:* N *Correction:* N

ANC_Metrohm_Grab	129.75965 µeq/L	Detected and Quantified	F	Actual			5/31/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	26.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	5/31/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	130.46594 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	69.08548 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	59.05271 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	6.01091 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	105.86266 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.66008 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	10.20623 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	29.4966 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	62.63972 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/3/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	265.27512 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	232.1022 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.87495	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW195 **Visit Date:** 10/12/2007 5:00 PM EDT
Visit Comment: 60% of reach has flow

Activity: 071012170001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7383	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	313.67701 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	39 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	219.56968 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	128.58259 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	74.99546 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.7055 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	153.7897 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	1.79349 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	9.97438 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	28.8123 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	61.19722 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	432.64672 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	413.66091 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.95612	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 071012170002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marcus Springmann **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071012170003 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No
Activity Comment: Samples taken ~10m down from tape due to low flow.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11.7 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW1L307 **Visit Date:** 5/25/2007 9:45 AM EDT

Activity: 070525094501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070525094502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7337	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	173.92214 µeq/L	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	32.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	136.91491 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	76.91743 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	116.1428 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/3/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.48323 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	231.46778 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	7.34541 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	1.19516 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	108.16909 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	29.54741 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	347.80378 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	312.8338 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.89945	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW1L307 **Visit Date:** 10/20/2007 4:45 PM EDT
Visit Comment: 100% surface flow

Activity: 071020164501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.1612	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	262.8127 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	38.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	167.06368 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	94.35952 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	130.99838 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/11/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	20.56622 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	255.8534 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	0.56528 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	93.13812 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	37.08052 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	412.9943 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	393.59662 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.95303	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 071020164502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071020164503 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW1L313 **Visit Date:** 5/30/2007 9:10 AM EDT

Activity: 070530091001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

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Activity: 070530091002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.2078	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	326.7075 µeq/L	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	44.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	225.12487 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	163.13086 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	91.44952 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/3/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.79225 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	210.35721 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	1.17217 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	18.12684 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	69.70965 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	40.46826 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	487.66967 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	455.01225 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.93303	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW1L313 **Visit Date:** 10/20/2007 12:15 PM EDT
Visit Comment: 100% surface flow

Activity: 071020121501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9657	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	453.01138 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	54.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	277.06569 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/11/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	208.41796 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/11/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	101.03402 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/11/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.7681 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	228.84665 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.29718 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	2.03834 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	59.35532 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Cl_Ions_Grab	53.9687 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	597.58295 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	568.37374 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.95112	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 071020121502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071020121503 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW216 **Visit Date:** 5/23/2007 9:17 AM EDT

Activity: 070523091701 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								

water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	NORMAL	Detected and Quantified	F	Actual

Activity: 070523091702 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6379	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	204.46815 µeq/L	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	30.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	138.0573 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	117.86523 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	68.99339 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	3.70377 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	160.80712 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	1.15129 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	59.98706 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	15.38795 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	24.26659 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	329.77098 µeq/L	Detected and Quantified	F	Actual				3/19/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
SAA_MET_IC2_GRAB	304.10975 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.92218	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: Shenandoah National Park

Project ID: SOURCH2O **Station ID:** SW216 **Visit Date:** 10/12/2007 11:00 AM EDT

Visit Comment: 100% surface flow

Activity: 071012110001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6736	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	232.55888 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	29.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	142.20791 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	121.66083 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	71.86404 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	2.85102 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	175.10452 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	3.76215 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	50.98164 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	14.44209 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	32.77832 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	342.34595 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	330.76093 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.96616	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 071012110002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071012110003 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW217 **Visit Date:** 5/23/2007 11:30 AM EDT

Activity: 070523113001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 070523113002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6805	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	153.73791 µeq/L	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	21.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	96.48154 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	81.5479 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	48.8899 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	3.48206 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	137.16373 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	3.81649 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	6.67845 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	14.07426 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	27.36962 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	234.21789 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	201.86024 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.86185	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SOURCH2O **Station ID:** SW217 **Visit Date:** 10/12/2007 12:10 PM EDT

Visit Comment: 100% of SR has flow. Stream channel ~ 1-2 in. deep.

Activity: 071012121001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.838	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	210.18061 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	24.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	122.8848 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	105.34814 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	46.98541 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_Grab	3.78256 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	141.51203 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	16.70408 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	38.06189 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	279.00741 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	264.98708 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94975	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071012121001 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8436	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	210.15258 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	24.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	121.20119 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	104.74045 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	46.91676 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	3.84653 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	141.3174 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	16.5841 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	38.40651 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	276.71143 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	265.18369 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95834	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071012121003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071012121003 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071012121005 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW224 **Visit Date:** 6/5/2007 6:30 PM EDT

Activity: 070605183001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070605183002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6526	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	62.19705 µeq/L	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	10.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	40.753 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	19.45889 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	39.73255 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	8.79266 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	113.97369 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	13.45418 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	15.18673 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	108.7436 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	90.87846 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.83571	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070605183002 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.634	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	62.01044 µeq/L	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	10.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	6/7/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	39.66701 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	19.50681 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	39.89842 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	8.90787 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	113.7786 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	13.16083 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	15.77128 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	107.98661 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	90.98305 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.84254	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW224 **Visit Date:** 9/29/2007 12:10 PM EDT
Visit Comment: Flagging not found

Activity: 070929121001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No
Activity Comment: 100% of SR has surface flow. 2 readings taken for conductivity.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 070929121002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2758	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	76.13261 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	11.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	45.88923 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	22.54394 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	45.20295 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	8.30286 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	131.95428 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	12.08931 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	22.85154 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	121.94548 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	111.11396 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.91118	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 070929121003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW227 **Visit Date:** 6/4/2007 4:30 PM EDT

Activity: 070604163001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070604163002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7933	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	79.26215 µeq/L	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	68.87215 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	27.36766 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	58.25081 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	11.11304 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	135.47694 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	44.48819 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	17.46295 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	165.61016 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	141.25379 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.85293	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW227 **Visit Date:** 9/29/2007 3:20 PM EDT
Visit Comment: Flag was approximately 200m downstream of site

Activity: 070929152001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No
Activity Comment: 100% of SR has surface flow

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 070929152002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4358	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	111.64274 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	17.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	78.43884 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	31.39737 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	62.4762 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	12.30937 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	149.14415 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	2.30628 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	3.60014 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	43.24499 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	20.14991 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	186.92806 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	178.63778 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95565	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070929152003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW240 **Visit Date:** 5/31/2007 4:30 PM EDT

Activity: 070531163001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								

water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	NORMAL	Detected and Quantified	F	Actual

Activity: 070531163002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No
Activity Comment: Stream heavily braided; large riparian plant habitat.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9986	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	217.20953 µeq/L	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	29.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	150.21279 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	94.57091 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	67.80136 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	4.7421 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	177.74913 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	7.0915 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	18.7365 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	27.24927 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.82109 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	324.41866 µeq/L	Detected and Quantified	F	Actual				3/19/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
SAA_MET_IC2_GRAB	285.01639 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.87854	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Activity: 070531163002 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** Yes

Activity Comment: Stream heavily braided; large riparian plant habitat.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.0353	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	215.85082 µeq/L	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	29.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	150.48351 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	94.67267 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	68.00215 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	4.74924 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	177.74913 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	3.00948 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	19.26393 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	27.01623 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.74227 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	320.91705 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	283.87325 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.88457	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SOURCH2O **Station ID:** SW240 **Visit Date:** 10/9/2007 1:30 PM EDT

Visit Comment: Stream has multiple braids and is interstitial at some points. 80% of reach has surface flow.

Activity: 071009133001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.1449	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	274.23212 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	32.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/11/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	171.619 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	111.19222 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	70.784 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.71345 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	188.38702 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008
Dilution: Y	*Recovery:* N	*Correction:* N						
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NO3_Ions_Grab	13.59878 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	24.04745 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	23.07649 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	360.31517 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	334.95484 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.92962	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 071009133002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071009133003 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	INTERSTITIAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW251 **Visit Date:** 6/6/2007 12:40 PM EDT

Activity: 070606124001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	16.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070606124002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No
Activity Comment: Noticed mold in sample 1/17/2008

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.5545	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	17.84871 µeq/L	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	17.83392 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	43.26106 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	21.51172 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	43.89246 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	93.52642 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	0.20355 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	3.02468 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	75.18253 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	20.40037 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	126.70271 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	116.45629 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.91913	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070606124002 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.5452	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	18.8636 µeq/L	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	17.04077 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	44.20952 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	21.60802 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	44.06802 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	94.10956 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	4.09379 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	75.58007 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	20.00777 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	126.93283 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	118.54523 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93392	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070606124003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	14.44777 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												

Activity: 070606124003 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	15.04429 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW251 **Visit Date:** 10/7/2007 1:30 PM EDT
Visit Comment: Very low flow. Too low for Q reading.

Activity: 071007133001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No
Activity Comment: Sample collected at small pool with very small input.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.6209	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	22.09205 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	30.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/11/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	50.34924 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	78.74193 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	30.36841 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	93.10409 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	196.11075 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	5.55552 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	1.3996 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	202.01551 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	26.73384 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	258.11919 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	252.241 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.97723	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 071007133002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	12.02417 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		9/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071007133003 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	MILD	Detected and Quantified	F	Actual								
flow_streamStage	NO FLOW	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW257 **Visit Date:** 5/31/2007 1:50 PM EDT

Activity: 070531135001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								

flow_streamStage	NORMAL	Detected and Quantified	F	Actual

Activity: 070531135002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.2006	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	241.59504 µeq/L	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	38.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	159.62166 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	137.28409 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	106.13809 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/4/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	5.54433 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	242.38261 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	4.156 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	12.54331 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	90.00147 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	24.02747 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	412.74417 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	368.16729 µeq/L	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				
IONRATIO_MET_IC2_GRAB	0.892	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW257 **Visit Date:** 10/9/2007 12:30 PM EDT
Visit Comment: Dry

Activity: 071009123001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	*Not Reported	*Not Reported	F	Actual								
flow_streamStage	DRY	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW260 **Visit Date:** 5/31/2007 10:10 AM EDT

Activity: 070531101001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	16.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

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Activity: 070531101002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.1472	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	421.62409 µeq/L	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	55.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	238.88308 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	231.82481 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/4/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	146.48142 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/4/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.10683 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	279.20455 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	137.61332 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	26.60261 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	623.30264 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	585.88052 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.93996	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW260 **Visit Date:** 10/7/2007 5:00 PM EDT
Visit Comment: Nice stream. Biggest yet. 100% of SR has flow.

Activity: 071007170001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy\Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.54	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	201.86549 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	32.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/11/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	129.36605 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	106.08553 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	90.92563 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	20.9614 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	143.37583 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	1.81533 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	21.49345 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	87.64748 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Cl_Ions_Grab	27.79798 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	349.15394 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	338.8044 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.97036	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 071007170002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy\Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071007170003 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy\Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW260 **Visit Date:** 10/9/2007 10:10 AM EDT
Visit Comment: 100% of stream reach has flow

Activity: 071009101001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6274	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	199.79778 µeq/L	Detected and Quantified	F	Actual								

Cond_VWR_Manual_Grab	32.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	10/11/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	134.15289 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	109.80266 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	85.17807 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	20.17612 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	144.72778 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	17.69395 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	87.14555 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.58994 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	349.31624 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	326.22722 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9339	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071009101002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071009101003 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW279 **Visit Date:** 5/28/2007 5:50 PM EDT

Activity: 070528175001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 070528175002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No
Activity Comment: Low flow with dry transects

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7092	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	23.68527 µeq/L	Detected and Quantified	F	Actual			6/4/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	20 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	6/4/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	26.24786 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	57.08769 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	27.68756 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	51.11613 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	115.08068 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	102.04742 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	25.50865 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	162.14574 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	151.28184 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.933	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Activity: 070528175002 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** Yes
Activity Comment: Low flow with dry transects

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.8955	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	23.73788 µeq/L	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	25.8774 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	57.21835 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	27.64168 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	51.08429 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	115.27712 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	102.05214 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	25.45176 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	161.82822 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	151.28228 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.93483	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 070528175003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	8.97772 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												

Activity: 070528175003 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	8.38832 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW279 **Visit Date:** 9/30/2007 3:30 PM EDT
Visit Comment: Dry

Activity: 070930153001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	*Not Reported	*Not Reported	F	Actual								
flow_streamStage	DRY	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW280 **Visit Date:** 6/1/2007 11:30 AM EDT

Activity: 070601113001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070601113002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.1373	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	18.47857 µeq/L	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	14 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	27.79412 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	26.92721 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	19.07364 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	44.95876 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	86.92184 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	5.7103 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	60.62223 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	19.0848 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	118.76023 µeq/L	Detected and Quantified	F	Actual				3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	103.8959 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.87484	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 070601113002 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.1448	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	18.20855 µeq/L	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	13.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	25.37345 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	26.0563 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	18.9487 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	44.7624 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	87.8926 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	60.25569 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	19.30402 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	115.14735 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	97.80876 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.84942	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SOURCH2O **Station ID:** SW280 **Visit Date:** 10/6/2007 4:20 PM EDT

Visit Comment: 40% of reach has SF. Too slow/low for Q reading.

Activity: 071006162001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Activity Comment: Samples obtained in pool ~3m x 1m. Very slow with small input/riffle at head.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.6987	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	42.86017 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	18.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/11/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	39.53423 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	41.92646 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	22.24573 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	54.68974 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	112.94481 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.51893 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	12.70039 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	71.33338 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.8594 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	158.91509 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	149.75334 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94235	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071006162001 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7646	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	43.32038 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	18.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/11/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	39.38622 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	41.96707 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	23.09113 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	55.33328 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	112.94481 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	1.07401 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	13.52584 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	71.4891 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	23.38059 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	160.85171 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	151.71591 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9432	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071006162003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	5.72688 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		9/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071006162003 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	5.55212 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		9/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071006162005 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NO FLOW	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW281 **Visit Date:** 5/22/2007 10:36 AM EDT

Activity: 070522103601 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10.4 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070522103602 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.5451	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	13.64868 µeq/L	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	21.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	26.22614 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	62.78962 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	27.23469 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	56.58095 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	115.0341 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	126.09693 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	23.48227 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	172.8379 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	163.26838 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.94463	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 070522103603 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	12.53473 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW285 **Visit Date:** 5/24/2007 11:10 AM EDT

Activity: 070524111001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070524111002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	4.7384	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-14.36661 µeq/L	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	14.6109 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	28.40829 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	16.92068 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	9.58704 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	87.90269 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	92.10093 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	19.12701 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	69.53341 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	96.90183 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	1.3936	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070524111003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	218.08931 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/23/2007				
Dilution: Y	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												

O_AL_TC_Grab	17.89611 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/23/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW285 **Visit Date:** 10/6/2007 12:20 PM EDT

Activity: 071006122001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.5603	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	13.80621 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	8.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/11/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	9.25985 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	12.9993 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	21.44393 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	14.74676 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	128.71792 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.2492 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	27.75478 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.75069 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	58.69904 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	63.35218 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	1.07927	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 071006122002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	15.1114 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		9/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071006122003 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Approx. 80% of reach has surface flow.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW287 **Visit Date:** 5/22/2007 3:45 PM EDT

Activity: 070522154501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.5 °C	Detected and Quantified	F	Actual								

weather	*Not Reported	*Not Reported	F	Actual
water_turbidity	*Not Reported	*Not Reported	F	Actual
flow_streamStage	*Not Reported	*Not Reported	F	Actual

Activity: 070522154502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.4977	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	5.13611 µeq/L	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	27.28298 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	43.37163 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	22.25137 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	41.0242 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	91.00727 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	88.71356 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	23.38666 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	133.93668 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	117.27683 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.87561	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 070522154503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	22.93224 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW287 **Visit Date:** 10/6/2007 10:20 AM EDT
Visit Comment: Site is "bottom" as given on blue folder locations. "Top" coordinates are not given.

Activity: 071006102001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.5298	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	11.60619 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	16.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/11/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	27.40112 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	42.21129 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	24.24707 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_Grab	42.83984 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	118.32585 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	16.75525 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	77.23976 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	23.02885 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	136.70582 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	128.63005 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94093	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071006102002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	17.05409 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		9/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071006102003 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No
Activity Comment: 100% of SR has surface flow

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	16.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW2L302 **Visit Date:** 5/29/2007 4:00 PM EDT

Activity: 070529160001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	16.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070529160002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6737	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	95.01497 µeq/L	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	59.64571 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	33.24388 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	66.00046 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	11.0279 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	161.20607 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	26.79695 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	30.54053 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	169.92445 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	152.39295 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.89683	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW2L302 **Visit Date:** 10/19/2007 2:40 PM EDT
Visit Comment: 100% of reach has surface flow

Activity: 071019144001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9404	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	150.72658 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	20.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	77.51988 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	46.80734 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	79.86213 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	16.16573 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	196.5028 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	24.18817 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	32.48325 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	220.36158 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	207.4385 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.94136	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Activity: 071019144001 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9358	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	150.47441 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	20.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	76.63635 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	46.49855 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	80.08883 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	16.2187 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	197.28034 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	24.29055 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	32.49185 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	219.44893 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
SAA_MET_IC2_GRAB	207.29731 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.94463	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Activity: 071019144003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071019144003 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071019144005 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No
Activity Comment: Rained in the AM; off/on drizzle

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	16.0 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW2L304 **Visit Date:** 5/23/2007 2:00 PM EDT

Activity: 070523140001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070523140002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6387	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	148.84835 µeq/L	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	28.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	130.66697 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	84.61186 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	63.72473 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	5.11912 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	117.24227 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	1.98247 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	11.36519 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	17.88869 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	77.05015 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/3/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	286.10515 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	255.15238 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.89181	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SOURCH2O **Station ID:** SW2L304 **Visit Date:** 10/12/2007 1:50 PM EDT

Visit Comment: 100% surface flow

Activity: 071012135001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7926	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	204.06799 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	27.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	152.71084 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	99.99811 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	56.31134 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_Grab	4.86222 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SiO2_TC_Grab	122.47445 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NH4_Ions_Grab	1.74233 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NO3_Ions_Grab	10.29577 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	14.92473 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	71.22244 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/10/2008
Dilution: Y	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	315.62484 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	300.51093 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.95211	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 071012135002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071012135003 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								

flow_streamStage	LOW	Detected and Quantified	F	Actual

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW2L308 **Visit Date:** 5/21/2007 2:45 PM EDT
Visit Comment: Aluminum tree tag on downed tree

Activity: 070521144501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	*Not Reported	*Not Reported	F	Actual								

Activity: 070521144502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2097	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	49.34366 µeq/L	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	22.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	81.23851 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	44.28188 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	71.19752 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	9.029 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	150.82177 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	103.06337 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	24.46327 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	205.75341 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	176.9108 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.85982	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SOURCH2O **Station ID:** SW2L308 **Visit Date:** 10/13/2007 5:00 PM EDT

Visit Comment: 40% surface flow. Couldn't get full 500 mL sample; stream not big enough.

Activity: 071013170001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6501	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	104.8126 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	27.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	107.86808 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	58.32643 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	96.07269 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/10/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
K_Ions_Grab	12.29513 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	208.95428 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	3.48698 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	26.64035 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	91.76322 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	36.18493 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	278.04931 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	259.4011 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93293	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071013170002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071013170003 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.7 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW3F105 **Visit Date:** 5/24/2007 4:00 PM EDT

Activity: 070524160001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070524160002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.6324	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	15.94029 µeq/L	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	31.99986 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	50.10186 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	26.15066 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	47.87369 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	91.60272 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	104.98367 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.87771 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	156.13257 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	143.84217 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.92128	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070524160002 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7011	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	15.89522 µeq/L	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	32.34835 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	50.27768 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	26.18649 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	47.86713 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	91.79759 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.21312 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	105.18458 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.87053 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	156.89277 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	143.99083 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.91777	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070524160003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	13.00076 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												

NPSTORET Results with Comments

Filtered Results

Activity: 070524160003 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	12.61271 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW3F105 **Visit Date:** 9/30/2007 5:40 PM EDT
Visit Comment: 50% of SR has surface flow.

Activity: 070930174001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No
Activity Comment: CR taken 15m down from "top" site.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 070930174002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.8777	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	33.91159 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	17.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	30.82926 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	49.8535 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	30.01564 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	44.9112 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	145.276 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	3.83789 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	86.40003 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.87869 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	155.6161 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	147.0282 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94481	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070930174003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	12.3928 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		9/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

NPSTORET Results with Comments

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Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW3L300 **Visit Date:** 5/28/2007 1:10 PM EDT

Activity: 070528131001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	*Not Reported	*Not Reported	F	Actual								

Activity: 070528131002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7024	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	5.34263 µeq/L	Detected and Quantified	F	Actual				6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	20.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	40.53471 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	53.99825 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	23.15288 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	49.689 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	95.69774 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.98096 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	6.77101 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	114.54676 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	20.51547 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	168.3558 µeq/L	Detected and Quantified	F	Actual				3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	147.17587 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.8742	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 070528131003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	13.23212 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW3L300 **Visit Date:** 9/30/2007 1:30 PM EDT
Visit Comment: Site nearly dry - revisited to obtain sample and conductivity from last week.

Activity: 070930133001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No
Activity Comment: ~ 15-28% of SR has surface flow

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	INTERSTITIAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070930133002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.5647	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	19.06927 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	21.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	37.48328 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	51.72793 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	24.98253 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	57.55716 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	138.90022 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	3.45703 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	120.81608 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.4801 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	171.7574 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	164.82248 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.95962	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 070930133003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Ben Sutphen **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	9.9704 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		9/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW3L302 **Visit Date:** 6/6/2007 3:20 PM EDT

Activity: 070606152001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070606152002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.5476	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	5.11806 µeq/L	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	21.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	6/7/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	41.77876 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	56.98679 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	25.04915 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	50.43434 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	105.39597 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.23349 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	126.54262 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	23.44212 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	174.48253 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	155.1433 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.88916	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070606152003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	22.30319 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SW3L302 **Visit Date:** 10/7/2007 11:20 AM EDT
Visit Comment: 100% surface flow

Activity: 071007112001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.4038	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	12.93866 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	29.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/11/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	69.36045 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	87.71893 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	31.82032 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	62.33132 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	161.55716 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	1.74944 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	206.40446 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	22.56577 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	251.23752 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	243.65833 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.96983	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 071007112002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	25.09493 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		9/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071007112003 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SOURCH2O **Station ID:** SWLIM1 **Visit Date:** 5/23/2007 4:10 PM EDT

Activity: 070523161001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070523161002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Spencer Ingram **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.0483	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	171.40767 µeq/L	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	27.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	141.56391 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	86.78585 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	52.93191 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	4.02691 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	118.42199 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NO3_Ions_Grab	10.04566 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	33.5854 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	48.04621 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	285.31508 µeq/L	Detected and Quantified	F	Actual				3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	263.08494 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.92209	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Organization: Shenandoah National Park

Project ID: SOURCH2O **Station ID:** SWLIM1 **Visit Date:** 10/12/2007 4:10 PM EDT

Visit Comment: 95% surface flow

Activity: 071012161001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.2068	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	381.62262 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	41.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	258.11135 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	162.79821 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	57.13196 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_Grab	4.50003 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	134.51 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	1.02891 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	1.51001 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	30.86709 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	50.24201 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	483.57046 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	464.24173 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96003	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071012161002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071012161003 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 1/2/2007 11:30 AM EST
Visit Comment: FAD //clear, cool
some rain

Activity: 070102113001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.5199	Detected and Quantified	F	Actual				1/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	2.96187 µeq/L	Detected and Quantified	F	Actual				1/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/4/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	23.60787 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	46.1921 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	23.14561 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	41.00563 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	94.985 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	0.86076 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	102.03462 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	22.36702 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	133.95771 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	128.22427 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.9572	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07010211300F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7 °C	Detected and Quantified	F	Actual				1/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 1/9/2007 12:30 PM EST
Visit Comment: FAD //
//clear, cold
mild, rain

Activity: 070109123001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.5271	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	2.66597 µeq/L	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/11/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	23.61224 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	45.25371 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	22.91121 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	41.56225 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	96.38 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	101.61918 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.42876 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	133.34591 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	126.75441 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95057	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07010912300F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7 °C	Detected and Quantified	F	Actual				1/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 1/16/2007 12:40 PM EST
Visit Comment: FAD //
//cloudy, cold
mild, fairly dry

Activity: 070116124001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.4974	Detected and Quantified	F	Actual				1/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	2.28462 µeq/L	Detected and Quantified	F	Actual				1/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/18/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	24.61952 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	46.38861 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	23.58829 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	40.96479 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	96.18 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	103.61353 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	23.4544 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	135.56771 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	129.39305 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.95445	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07011612400F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9 °C	Detected and Quantified	F	Actual				1/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 1/23/2007 11:50 AM EST
Visit Comment: FAD //
//cloudy, cold light snow

Activity: 070123115001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.4523	Detected and Quantified	F	Actual				1/25/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	2.75368 µeq/L	Detected and Quantified	F	Actual				1/25/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/25/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	25.13783 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	48.27851 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	23.72897 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	36.87244 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	92.977 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	103.21636 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.94054 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	134.02425 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	128.95108 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96215	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07012311500F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	4.5 °C	Detected and Quantified	F	Actual				1/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 1/30/2007 12:45 PM EST
Visit Comment: FAD //
//cloudy, cold.
cold, dry.

Activity: 070130124501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.5503	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	3.19821 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	24.82688 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	48.2719 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	24.22132 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	34.79526 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	92.479 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	102.24659 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	22.849 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

T_AL_TC_Grab	27.969 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/17/2007			
Dilution: N	*Recovery:* N	*Correction:* N									
SBC_IC2_GRAB	132.12186 µeq/L	Detected and Quantified	F	Actual				2/6/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
SAA_MET_IC2_GRAB	128.3343 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.97133	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Activity: 07013012450F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	2 °C	Detected and Quantified	F	Actual				1/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 2/6/2007 12:30 PM EST
Visit Comment: FAD //
//brutally cold.
Dry, getting colder.

Activity: 070206123001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.477	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	3.47849 µeq/L	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/8/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	25.43718 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	50.72909 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	25.14007 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	34.48831 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	95.035 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	1.26304 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	104.60123 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	23.96029 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	135.80115 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	133.30305 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9816	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07020612300F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	0 °C	Detected and Quantified	F	Actual				2/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 2/14/2007 12:20 PM EST
Visit Comment: FAD //
//cold today
wintry mix last night

Activity: 070214122001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.5302	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	3.05157 µeq/L	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	23.09809 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	45.09732 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	22.35377 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	31.90705 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	81.556 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	2.89173 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	92.41226 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	20.62962 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	122.46273 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	118.98518 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.9716	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07021412200F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	0 °C	Detected and Quantified	F	Actual				2/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 2/20/2007 11:55 AM EST
Visit Comment: FAD //
//cool, cloudy
cold, some snow

Activity: 070220115501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.4704	Detected and Quantified	F	Actual				3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	3.05603 µeq/L	Detected and Quantified	F	Actual				3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	24.0579 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	46.75671 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	23.89474 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	33.06536 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	87.631 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	1.90239 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	97.37002 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.89946 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	127.78121 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	124.2279 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97219	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07022011550F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	1.5 °C	Detected and Quantified	F	Actual				2/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 2/27/2007 11:45 AM EST
Visit Comment: FAD //
//clear, cool
some frozen precip

Activity: 070227114501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.4718	Detected and Quantified	F	Actual				3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	3.07787 µeq/L	Detected and Quantified	F	Actual				3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	23.59508 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	47.91877 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	23.64922 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	36.8481 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	90.304 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	0.76444 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	104.63344 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.88254 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	132.01767 µeq/L	Detected and Quantified	F	Actual				2/6/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
SAA_MET_IC2_GRAB	130.35829 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.98743	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Activity: 07022711450F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	4.5 °C	Detected and Quantified	F	Actual				2/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 3/6/2007 11:55 AM EST
Visit Comment: FAD //
//clear, cold
significant rain

Activity: 070306115501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.52	Detected and Quantified	F	Actual				3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	1.9678 µeq/L	Detected and Quantified	F	Actual				3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	23.08171 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	46.65193 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	22.35984 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	37.54539 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	89.192 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.66789 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	104.61908 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.28321 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	129.64537 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	128.53798 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.99146	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07030611550F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	4 °C	Detected and Quantified	F	Actual				3/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 3/13/2007 1:10 PM EDT
Visit Comment: FAD //
//WARM, CLOUDY
dry

Activity: 070313131001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.4553	Detected and Quantified	F	Actual				3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	2.48829 µeq/L	Detected and Quantified	F	Actual				3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	23.47679 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	46.16248 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	23.27271 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	37.53162 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	91.433 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	104.87959 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	22.26393 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	130.4501 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	129.67231 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.99404	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07031313100F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	8.5 °C	Detected and Quantified	F	Actual				3/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 3/20/2007 1:10 PM EDT
Visit Comment: FAD //
//clear, mild
rain and snow at higher elevations

Activity: 070320131001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.3857	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	2.03156 µeq/L	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	22.68237 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	44.51205 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	22.15042 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	40.73435 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	90.088 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	1.01019 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	104.54247 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.65075 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	130.08569 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	129.23497 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.99346	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07032013100F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9.5 °C	Detected and Quantified	F	Actual				3/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 3/27/2007 11:55 AM EDT
Visit Comment: FAD //
//couldy, warm spring-like

Activity: 070327115501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.3619	Detected and Quantified	F	Actual				4/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	0.92392 µeq/L	Detected and Quantified	F	Actual				4/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/3/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	22.4763 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	43.62271 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	23.0405 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	40.89469 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	92.578 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	103.87746 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	22.1765 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	130.0407 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	127.01838 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.97676	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07032711550F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12 °C	Detected and Quantified	F	Actual				3/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 4/3/2007 12:45 PM EDT
Visit Comment: FAD //
//warm, sunny mostly dry

Activity: 070403124501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.4617	Detected and Quantified	F	Actual				4/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	1.98889 µeq/L	Detected and Quantified	F	Actual				4/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/5/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	22.50103 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	42.63164 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	23.2725 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	41.2199 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	94.122 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	102.64083 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.31717 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	129.63157 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	126.98739 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9796	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07040312450F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13 °C	Detected and Quantified	F	Actual				4/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 4/10/2007 1:15 PM EDT
Visit Comment: FAD //
//clear, cool
some rain

Activity: 070410131501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.4458	Detected and Quantified	F	Actual				4/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-0.16713 µeq/L	Detected and Quantified	F	Actual				4/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/16/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	23.75523 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	44.44573 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	23.42696 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	37.95905 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	90.636 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	0.81601 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	101.4081 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.87925 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	129.59347 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	123.93623 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.95635	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07041013150F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	8.5 °C	Detected and Quantified	F	Actual				4/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 4/18/2007 11:25 AM EDT

Activity: 070418112501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9.0 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	ABOVE NORMAL	Detected and Quantified	F	Actual								
days_since_precip	4 days	Detected and Quantified	F	Actual								

Activity: 070418112503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.4294	Detected and Quantified	F	Actual				4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	1.10328 µeq/L	Detected and Quantified	F	Actual			4/20/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	19.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	4/20/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	22.25714 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	43.71988 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	21.84916 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	42.40439 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	88.97988 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.20051 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.69395 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	104.78142 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.187 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	130.43108 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	127.76565 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97956	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 4/24/2007 1:45 PM EDT

Activity: 070424134501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
days_since_precip	8 days	Detected and Quantified	F	Actual								

Activity: 070424134503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.3837	Detected and Quantified	F	Actual				4/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-0.02266 µeq/L	Detected and Quantified	F	Actual				4/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	24.03191 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	43.95376 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	23.13763 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	41.49247 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	91.9099 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	105.34549 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.77368 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	132.62227 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	128.13701 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96618	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070424134504 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	33.89076 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 5/2/2007 1:05 PM EDT

Activity: 070502130501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	16.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								

water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	NORMAL	Detected and Quantified	F	Actual
days_since_precip	1 days	Detected and Quantified	F	Actual

Activity: 070502130503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.4556	Detected and Quantified	F	Actual				5/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	1.44214 µeq/L	Detected and Quantified	F	Actual				5/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	22.30778 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	42.11345 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	23.9058 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	41.55566 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	95.3999 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	102.60522 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	23.31598 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	129.88919 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	127.40384 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.98087	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** DR01 **Visit Date:** 5/8/2007 1:20 PM EDT

Activity: 070508132001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070508132003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.5	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	1.89672 µeq/L	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	21.81598 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	41.81816 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	23.61985 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	41.55171 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	95.10032 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	101.64234 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.68206 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	128.8122 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	126.26162 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9802	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** DR01 **Visit Date:** 5/15/2007 12:45 PM EDT

Activity: 070515124501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070515124503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.4836	Detected and Quantified	F	Actual				5/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	2.16775 µeq/L	Detected and Quantified	F	Actual				5/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	21.40424 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	41.27955 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	24.26351 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	42.5561 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	98.41647 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	99.34606 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	23.12027 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	129.5099 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	124.67458 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.96266	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 5/22/2007 12:50 PM EDT

Activity: 070522125001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070522125003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.5189	Detected and Quantified	F	Actual				5/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	2.02185 µeq/L	Detected and Quantified	F	Actual				5/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	20.14599 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	39.64319 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	24.47828 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	43.68164 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	100.17308 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	99.37784 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	23.05243 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	127.9556 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	124.49262 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97294	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** DR01 **Visit Date:** 5/29/2007 2:10 PM EDT

Activity: 070529141001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070529141002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.5524	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	3.14705 µeq/L	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	20.78018 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	40.38623 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	25.37761 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	44.55895 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	103.12246 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	96.82151 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	24.24031 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	131.10947 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	124.24937 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.94768	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 6/4/2007 12:20 PM EDT

Activity: 070604122001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070604122002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.5292	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	2.78062 µeq/L	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	20.50402 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	38.7928 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	25.16363 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	43.98431 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	104.03258 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	93.32319 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	23.36546 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	128.45126 µeq/L	Detected and Quantified	F	Actual				3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	119.50977 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.93039	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** DR01 **Visit Date:** 6/11/2007 12:30 PM EDT

Activity: 070611123001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070611123002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.5612	Detected and Quantified	F	Actual				6/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	3.46548 µeq/L	Detected and Quantified	F	Actual				6/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	20.039 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	39.64256 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	26.14763 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	44.05116 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	108.12379 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.18546 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	1.03124 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	92.02232 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	25.01719 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	130.06581 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	121.53623 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.93442	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 6/18/2007 12:15 PM EDT

Activity: 070618121501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 070618121502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.5336	Detected and Quantified	F	Actual				6/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	5.25303 µeq/L	Detected and Quantified	F	Actual				6/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	19.98403 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	39.59346 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	26.9016 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	42.81902 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	107.966 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.46037 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	89.45622 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	25.77746 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	129.75848 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	120.52721 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.92886	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** DR01 **Visit Date:** 6/26/2007 8:48 AM EDT

Activity: 070626084801 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	20.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070626084802 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.6122	Detected and Quantified	F	Actual				6/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	7.57505 µeq/L	Detected and Quantified	F	Actual				6/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	21.54359 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	40.98464 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	26.69683 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	42.64105 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	109.13721 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.30967 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	3.93276 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	87.87002 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	26.78469 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	132.17578 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	126.16252 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.95451	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 7/4/2007 12:20 PM EDT

Activity: 070704122001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	22.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070704122002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.599	Detected and Quantified	F	Actual				8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	8.69925 µeq/L	Detected and Quantified	F	Actual				8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	15.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	20.7072 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	39.70219 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	24.84883 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	41.06139 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	100.557 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	83.76119 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	23.7324 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	126.32611 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	116.23334 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.92011	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** DR01 **Visit Date:** 7/9/2007 11:30 AM EDT

Activity: 070709113001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	23.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070709113002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.715	Detected and Quantified	F	Actual				7/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	10.25524 µeq/L	Detected and Quantified	F	Actual				7/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	15.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	21.48897 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	41.22591 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	26.09485 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	42.20692 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	109.5277 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	1.30083 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	84.5981 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	25.97323 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	131.02315 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	122.1274 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.93211	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 7/18/2007 1:13 PM EDT

Activity: 070718131301 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	23.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 070718131302 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.4998	Detected and Quantified	F	Actual				7/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	10.9353 µeq/L	Detected and Quantified	F	Actual				7/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	20.16361 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	38.62636 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	26.79977 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	41.90967 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	107.85686 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	5.71241 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	81.67271 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	26.71843 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	127.50591 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	125.03885 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.98065	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** DR01 **Visit Date:** 7/24/2007 3:30 PM EDT

Activity: 070724153001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	22.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	INTERSTITIAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070724153002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.4683	Detected and Quantified	F	Actual				7/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	23.69297 µeq/L	Detected and Quantified	F	Actual				7/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	25.3169 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	45.57385 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	28.8156 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	42.47979 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	109.99904 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	6.72726 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	80.74833 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	28.54522 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	142.19264 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	139.71378 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.98257	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 7/31/2007 1:36 PM EDT

Activity: 070731133601 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	24.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	INTERSTITIAL	Detected and Quantified	F	Actual								

Activity: 070731133602 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.4312	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	15.89131 µeq/L	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	21.87586 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	42.66254 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	32.69059 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	44.17622 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	139.58775 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	1.27288 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	5.72273 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	80.53733 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	31.89962 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	142.67809 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	134.05099 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93953	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070731133603 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** DR01 **Visit Date:** 8/8/2007 11:17 AM EDT

Activity: 070808111701 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	21.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								

water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	INTERSTITIAL	Detected and Quantified	F	Actual

Activity: 070808111702 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.4655	Detected and Quantified	F	Actual				8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	14.59131 µeq/L	Detected and Quantified	F	Actual				8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	22.24677 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	43.51439 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	28.44701 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	45.50007 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	115.17288 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	5.242 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	81.92031 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	29.45658 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	139.71474 µeq/L	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				
SAA_MET_IC2_GRAB	131.2102 µeq/L	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				
IONRATIO_MET_IC2_GRAB	0.93913	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 8/15/2007 1:00 PM EDT
Visit Comment: no water

Activity: 070815130001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	DRY	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 8/22/2007 2:50 PM EDT

Activity: 070822145001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	20.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070822145002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.393	Detected and Quantified	F	Actual				8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	11.02602 µeq/L	Detected and Quantified	F	Actual				8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	15.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	20.07286 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	37.85613 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	24.86913 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	41.08326 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	103.62914 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	0.8942 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	83.30702 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	23.76493 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	123.88788 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	118.99217 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.96048	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 8/29/2007 12:04 PM EDT

Activity: 070829120401 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	21.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070829120402 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.3925	Detected and Quantified	F	Actual				8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	10.5012 µeq/L	Detected and Quantified	F	Actual				8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	15.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	18.70351 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	35.48098 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	24.54624 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	40.01055 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	107.85823 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	80.32182 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	24.44765 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	118.74778 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	115.31117 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97106	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** DR01 **Visit Date:** 9/5/2007 12:10 PM EDT

Visit Comment: No flow - no sample collected

Activity: 070905121001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NO FLOW	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 9/12/2007 12:12 PM EDT
Visit Comment: No flow - no sample taken.

Activity: 070912121201 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NO FLOW	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 9/19/2007 12:04 PM EDT
Visit Comment: Dry - no sample taken

Activity: 070919120401 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	*Not Reported	*Not Reported	F	Actual								
flow_streamStage	DRY	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 9/26/2007 12:20 PM EDT
Visit Comment: Dry - no sample taken

Activity: 070926122001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								

water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	DRY	Detected and Quantified	F	Actual

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 10/3/2007 1:09 PM EDT
Visit Comment: Dry - no sample taken.
Took 2 tires out of stream bed.

Activity: 071003130901 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Suzanne Maben\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	DRY	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 10/8/2007 2:00 PM EDT
Visit Comment: Dry - no sample collected

Activity: 071008140001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	DRY	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 10/16/2007 12:25 PM EDT
Visit Comment: Dry - no sample taken

Activity: 071016122501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	DRY	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 10/23/2007 11:15 AM EDT
Visit Comment: Dry-no sample taken

Activity: 071023111501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	*Not Reported	*Not Reported	F	Actual								
flow_streamStage	DRY	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 10/29/2007 1:30 PM EDT
Visit Comment: ~ 95% surface flow

Activity: 071029133001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								

water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	LOW	Detected and Quantified	F	Actual

Activity: 071029133002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.6273	Detected and Quantified	F	Actual				10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	8.45241 µeq/L	Detected and Quantified	F	Actual				10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	19.63381 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	38.52854 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	26.17519 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	38.16913 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	99.99696 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	85.40011 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	26.93583 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	122.51317 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	120.82885 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.98625	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 071029133003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	21.47957 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		9/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 11/6/2007 1:00 PM EST
Visit Comment: No flow - no sample taken

Activity: 071106130001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NO FLOW	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 11/13/2007 1:00 PM EST
Visit Comment: Stream dry - no sample

Activity: 071113130001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NO FLOW	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 11/19/2007 1:45 PM EST
Visit Comment: Dry - no sample taken

Activity: 071119134501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NO FLOW	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 11/26/2007 12:55 PM EST
Visit Comment: Dry - no sample collected

Activity: 071126125501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	5	Detected and Quantified	F	Actual								

water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	NO FLOW	Detected and Quantified	F	Actual

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 12/4/2007 1:30 PM EST
Visit Comment: Dry - no sample taken

Activity: 071204133001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NO FLOW	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 12/11/2007 12:15 PM EST
Visit Comment: Stream dry - no sample taken

Activity: 071211121501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NO FLOW	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** DR01 **Visit Date:** 12/17/2007 1:50 PM EST

Activity: 071217135001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	3.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071217135002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.4692	Detected and Quantified	F	Actual				12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	7.00647 µeq/L	Detected and Quantified	F	Actual				12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	20.62173 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
Mg_Ions_Grab	40.10028 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
Na_Ions_Grab	26.86478 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
K_Ions_Grab	39.11284 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												

SiO2_TC_Grab	97.93231 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	88.16827 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
Cl_Ions_Grab	27.34786 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SBC_IC2_GRAB	126.70613 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	122.5631 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9673	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** DR01 **Visit Date:** 12/26/2007 11:50 AM EST

Activity: 071226115001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	3.5 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	INTERSTITIAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071226115002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.5857	Detected and Quantified	F	Actual				1/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	7.85472 µeq/L	Detected and Quantified	F	Actual				1/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: estimated 1/8/08												
Ca_Ions_Grab	21.03257 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
Mg_Ions_Grab	42.02622 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
Na_Ions_Grab	28.64651 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
K_Ions_Grab	35.75133 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
SiO2_TC_Grab	97.73947 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												

SO4_Ions_Grab	91.25126 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
Cl_Ions_Grab	26.6802 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SBC_IC2_GRAB	127.46313 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	125.82668 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.98716	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** MAD2 **Visit Date:** 1/30/2007 12:30 PM EST

Visit Comment: FAD
//
//cloudy, cold.
cold, dry.

Activity: 070130123001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7721	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	89.82276 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	21.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	51.80678 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	76.69057 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	41.735 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	20.079 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	117.379 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	69.18989 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	24.23173 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	190.31785 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	183.28488 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96305	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07013012300F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	1.5 °C	Detected and Quantified	F	Actual				1/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** MAD2 **Visit Date:** 4/24/2007 1:25 PM EDT

Activity: 070424132501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
days_since_precip	8 days	Detected and Quantified	F	Actual								

Activity: 070424132503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7819	Detected and Quantified	F	Actual				4/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	96.08537 µeq/L	Detected and Quantified	F	Actual				4/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	21.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	53.0805 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	75.18608 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	42.91858 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	26.77443 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	123.93926 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	67.59659 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	24.20482 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	197.96609 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	187.92728 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94929	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070424132504 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** MAD2 **Visit Date:** 7/31/2007 12:37 PM EDT

Activity: 070731123701 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070731123702 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7023	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	211.88095 µeq/L	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	28.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	91.0778 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	127.06813 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	60.13434 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	39.31925 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	188.71702 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.22964 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	1.08338 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	62.73452 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	24.20414 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	317.82916 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	299.90299 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.9436	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 070731123703 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** MAD2 **Visit Date:** 10/29/2007 12:30 PM EDT

Activity: 071029123001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071029123002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7751	Detected and Quantified	F	Actual				10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	174.84353 µeq/L	Detected and Quantified	F	Actual				10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	29.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	96.44771 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	117.76968 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	53.81323 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	36.3544 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	140.23865 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	88.68853 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	32.32427 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	304.39152 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	295.89683 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97209	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071029123003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 1/3/2007 11:15 AM EST
Visit Comment: FAD //
//clear, mild
some rain

Activity: 070103111501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.453	Detected and Quantified	F	Actual				1/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	45.99169 µeq/L	Detected and Quantified	F	Actual				1/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	23.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/4/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	71.99871 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	41.2497 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	71.05195 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	8.18078 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	156.438 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	4.9804 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	97.76699 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	24.96204 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	192.48764 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	173.70112 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.9024	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07010311150F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7 °C	Detected and Quantified	F	Actual				1/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 1/10/2007 10:30 AM EST
Visit Comment: FAD //
//cold, cloudy
mild, some rain

Activity: 070110103001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.416	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	44.29176 µeq/L	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	23 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/11/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	72.79298 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	41.64079 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	70.58897 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	8.02126 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	156.953 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	8.45442 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	105.57341 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	24.216 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	193.0505 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	182.53559 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94553	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07011010300F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	6 °C	Detected and Quantified	F	Actual				1/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 1/17/2007 11:45 AM EST
Visit Comment: FAD //
//clear, cold
mild, then cold

Activity: 070117114501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.482	Detected and Quantified	F	Actual				1/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	49.61582 µeq/L	Detected and Quantified	F	Actual				1/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	23.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/18/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	73.15226 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	41.51066 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	72.4895 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.67446 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	163.228 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	1.25789 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	94.84783 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	26.1 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	194.83338 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	171.82154 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.88189	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07011711450F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	5.5 °C	Detected and Quantified	F	Actual				1/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 1/24/2007 10:55 AM EST
Visit Comment: FAD
//light snow
light snow

Activity: 070124105501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4503	Detected and Quantified	F	Actual				1/25/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	48.29029 µeq/L	Detected and Quantified	F	Actual				1/25/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	22.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/25/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	71.33793 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	40.87826 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	72.85988 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	7.55379 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	163.958 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	5.19777 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	95.52696 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	27.05621 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	192.63636 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	176.07123 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.91401	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07012410550F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	4 °C	Detected and Quantified	F	Actual				1/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 1/31/2007 10:20 AM EST
Visit Comment: FAD //ice on staff and in well
//cold
cold, dry

Activity: 070131102001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5379	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	47.77738 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	22.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	67.73442 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	39.7078 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	72.63018 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.05121 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	165.336 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	5.08233 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	90.26157 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	27.52181 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	187.13011 µeq/L	Detected and Quantified	F	Actual				2/6/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
SAA_MET_IC2_GRAB	170.64309 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.9119	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Activity: 07013110200F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	1 °C	Detected and Quantified	F	Actual				1/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 0701311020TB **Activity Type:** Quality Control Sample-Trip Blank **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.8269	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-1.00061 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	0.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	1.74535 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	1.24005 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	0.37622 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	0.39401 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	*Non-detect	*Non-detect	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Result Comment: Reported value of 0.714.							
NH4_Ions_Grab	0.21397 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.31 ueq/L	0.986 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	0.40575 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	*Non-detect	*Non-detect	F	Actual	1.524 ug/l	4.845 ug/l	7/17/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Result Comment: Reported value of 0.937.							
SBC_IC2_GRAB	3.9696 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	-0.39936 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	-0.1006	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 2/7/2007 11:05 AM EST
Visit Comment: FAD //well frozen
//cold, clear
snow last night ~4 inches

Activity: 070207110501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4235	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	46.87771 µeq/L	Detected and Quantified	F	Actual			2/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	22.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	2/8/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_Grab	68.68768 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	40.25908 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	72.49724 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	6.93767 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	164.572 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	11.91722 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	93.81803 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	28.04789 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	188.38817 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	180.66085 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95898	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07020711050F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	1 °C	Detected and Quantified	F	Actual				2/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 2/15/2007 11:15 AM EST
Visit Comment: FAD //Well frozen.
//brutally cold
mixed precip on Wednesday. Several inches of frozen snow around Sperryville. Treacherous walking.

Activity: 070215111501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5689	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	46.67342 µeq/L	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	22.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	66.09177 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	38.86772 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	72.36082 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.88899 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	164.622 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	9.26518 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	84.75319 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	27.13258 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	184.2158 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	167.82437 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.91102	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07021511150F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	1 °C	Detected and Quantified	F	Actual				2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 2/21/2007 10:25 AM EST
Visit Comment: FAD //
//clearing, warmer
some snow

Activity: 070221102501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0296	Detected and Quantified	F	Actual				3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	46.09616 µeq/L	Detected and Quantified	F	Actual			3/1/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	22.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	3/1/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_Grab	69.24162 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	39.78274 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	72.80952 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	7.25623 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	159.294 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	14.44894 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	86.85097 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	28.70482 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	189.09661 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	176.10089 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93127	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

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Activity: 07022110250F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	2.5 °C	Detected and Quantified	F	Actual				2/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 2/28/2007 10:45 AM EST
Visit Comment: FAD //
//clear, cool
some snow

Activity: 070228104501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.502	Detected and Quantified	F	Actual				3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	51.20463 µeq/L	Detected and Quantified	F	Actual				3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	22 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	65.40919 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	38.22136 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	74.80294 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.24565 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	168.59 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	88.72082 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	25.10684 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	185.68564 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	165.07279 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.88899	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07022810450F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	3 °C	Detected and Quantified	F	Actual				2/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 3/7/2007 10:55 AM EST
Visit Comment: FAD //
//couldy, cold
significant rain

Activity: 070307105501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4825	Detected and Quantified	F	Actual				3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	42.18376 µeq/L	Detected and Quantified	F	Actual			3/8/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	22.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	3/8/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_Grab	66.04449 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	39.31546 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	70.30647 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	7.55412 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	155.409 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	10.85406 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	97.09987 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	24.3006 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	183.22704 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	174.43829 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95203	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

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Activity: 07030710550F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	3 °C	Detected and Quantified	F	Actual				3/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 3/14/2007 11:25 AM EDT
Visit Comment: FAD //
//warm, cloudy
dry

Activity: 070314112501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5846	Detected and Quantified	F	Actual				3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	49.8368 µeq/L	Detected and Quantified	F	Actual				3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	22.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	66.68532 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	38.9245 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	73.09439 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	8.09171 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	159.891 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	7.15877 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	95.51448 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	25.9148 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	186.80242 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	178.42485 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95515	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07031411250F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7 °C	Detected and Quantified	F	Actual				3/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 3/21/2007 10:25 AM EDT
Visit Comment: FAD
//
//cloudy, cool
rain and snow last Friday

Activity: 070321102501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5127	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	41.74722 µeq/L	Detected and Quantified	F	Actual			3/21/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	22.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	3/21/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_Grab	71.19232 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	41.45462 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	69.291 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	8.15192 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	148.968 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	12.42305 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	100.63846 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	23.29271 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	190.09636 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	178.10144 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9369	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Activity: 07032110250F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	5.5 °C	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 3/28/2007 11:05 AM EDT
Visit Comment: FAD //
//clear, warm spring-like

Activity: 070328110501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4761	Detected and Quantified	F	Actual				4/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	44.68472 µeq/L	Detected and Quantified	F	Actual				4/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	23.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/3/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	72.62411 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	41.55099 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	70.46524 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	8.80507 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	149.002 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	7.99277 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	101.01107 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	24.35204 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	193.45191 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	178.0406 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.92034	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07032811050F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10 °C	Detected and Quantified	F	Actual				3/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 4/4/2007 10:20 AM EDT
Visit Comment: FAD //
//clear, cool
rain last night

Activity: 070404102001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5341	Detected and Quantified	F	Actual				4/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	52.64751 µeq/L	Detected and Quantified	F	Actual			4/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	23.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	4/5/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_Grab	73.2817 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	42.00697 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	72.77781 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	8.85168 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	157.235 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	4.45332 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	98.30615 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	25.4797 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	196.92466 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	180.88668 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.91856	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07040410200F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10.5 °C	Detected and Quantified	F	Actual				4/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 4/11/2007 10:30 AM EDT
Visit Comment: FAD //
//cloudy, cool light rain

Activity: 070411103001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2827	Detected and Quantified	F	Actual				4/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	46.03728 µeq/L	Detected and Quantified	F	Actual				4/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	23.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/16/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	71.02218 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	41.04631 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	71.5524 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.88376 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	157.667 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	8.1591 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	94.99996 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	26.03594 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	191.51115 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	175.23228 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.915	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07041110300F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	6 °C	Detected and Quantified	F	Actual				4/11/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 4/19/2007 12:40 PM EDT

Activity: 070419124001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7.5 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	ABOVE NORMAL	Detected and Quantified	F	Actual								
days_since_precip	0 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

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Activity: 070419124002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.90 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.93 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.95 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	*Absent	*Absent	F	Actual								
voltage_solarLoad	13.35 volts	Detected and Quantified	F	Actual								

Activity: 070419124003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4625	Detected and Quantified	F	Actual				4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	45.40733 µeq/L	Detected and Quantified	F	Actual				4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	23.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	74.24893 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	42.0905 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	69.56475 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
K_Ions_Grab	8.48484 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												

SiO2_TC_Grab	150.13188 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	5.86835 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	104.01391 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	23.29518 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	194.39552 µeq/L	Detected and Quantified	F	Actual			12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	178.58477 µeq/L	Detected and Quantified	F	Actual			12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.91867	Detected and Quantified	F	Actual			12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** NFDR **Visit Date:** 4/25/2007 11:20 AM EDT

Activity: 070425112001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	1 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070425112002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.84 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.83 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.84 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	*Not Reported	*Not Reported	F	Actual								
voltage_solarLoad	*Not Reported	*Not Reported	F	Actual								

Activity: 070425112003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4993	Detected and Quantified	F	Actual				4/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	52.958 µeq/L	Detected and Quantified	F	Actual				4/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	23.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	72.81572 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	41.03271 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	73.2946 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	9.12465 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	158.5803 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	1.57961 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	99.03853 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	25.67504 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	196.27418 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	179.25118 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.91327	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070425112004 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 5/3/2007 11:20 AM EDT

Activity: 070503112001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.0 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	0 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070503112002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No
Activity Comment: needs pen

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.78 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.78 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.79 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.70 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.03 volts	Detected and Quantified	F	Actual								

Activity: 070503112003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.1926	Detected and Quantified	F	Actual				5/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	60.31041 µeq/L	Detected and Quantified	F	Actual				5/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	24.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	76.71043 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	43.28027 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	76.71583 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	9.71671 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	166.44356 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	91.48976 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	26.62822 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	206.42974 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	178.46889 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.86455	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** NFDR **Visit Date:** 5/9/2007 12:45 PM EDT

Activity: 070509124501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070509124502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.75 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.74 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.76 ft	Detected and Quantified	F	Actual								

voltage_StevensClock	8.68 volts	Detected and Quantified	F	Actual
voltage_solarLoad	13.47 volts	Detected and Quantified	F	Actual

Activity: 070509124503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5767	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	64.42115 µeq/L	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	21.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	76.36945 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	42.85937 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	77.75573 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	9.62618 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	170.40685 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	86.34743 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	27.11053 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	206.61723 µeq/L	Detected and Quantified	F	Actual		3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N				
SAA_MET_IC2_GRAB	177.91961 µeq/L	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				
IONRATIO_MET_IC2_GRAB	0.86111	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** NFDR **Visit Date:** 5/16/2007 11:15 AM EDT

Activity: 070516111501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070516111502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.74 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.72 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.74 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.68 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.11 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070516111503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6106	Detected and Quantified	F	Actual				5/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	69.28124 µeq/L	Detected and Quantified	F	Actual				5/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	22.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	80.00341 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	44.52192 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	79.89904 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.09367 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	176.95372 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	93.10268 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	27.52191 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	214.52454 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	189.94633 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.88543	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 5/23/2007 11:55 AM EDT

Activity: 070523115501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070523115502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.79 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.78 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.80 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.67 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.95 volts	Detected and Quantified	F	Actual								

Activity: 070523115503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6112	Detected and Quantified	F	Actual				5/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	58.32746 µeq/L	Detected and Quantified	F	Actual				5/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	22 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	5/24/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	78.96895 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	44.20501 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	74.71474 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	9.28534 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	163.60089 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.364 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	101.74209 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	24.60228 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	207.53804 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	184.71233 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.89002	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 5/30/2007 1:05 PM EDT

Activity: 070530130501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.2 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070530130502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.74 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.75 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.74 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.68 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.86 volts	Detected and Quantified	F	Actual								

Activity: 070530130503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5764	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	66.37622 µeq/L	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	22.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	84.1025 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	46.47828 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	77.68543 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	10.0548 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	171.39711 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	94.55332 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	26.27188 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	218.32751 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	187.24192 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.85762	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** NFDR **Visit Date:** 6/6/2007 1:07 PM EDT

Activity: 070606130701 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								

flow_streamStage	NORMAL	Detected and Quantified	F	Actual

Activity: 070606130702 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.76 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.77 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.77 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.67 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.71 volts	Detected and Quantified	F	Actual								

Activity: 070606130703 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5992	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	58.14888 µeq/L	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	22.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	82.77079 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	46.09179 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	75.03612 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	9.60935 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	164.73834 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	0.38733 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	1.44636 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	102.00031 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	24.01036 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	213.89538 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	185.60591 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.86774	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** NFDR **Visit Date:** 6/12/2007 12:40 PM EDT

Activity: 070612124001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070612124002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Activity Comment: Solar battery low already, changed last week

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.71 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.72 ft	Detected and Quantified	F	Actual								

WatLev_AXSYS	0.71 ft	Detected and Quantified	F	Actual
voltage_StevensClock	8.67 volts	Detected and Quantified	F	Actual
voltage_solarLoad	12.83 volts	Detected and Quantified	F	Actual

Activity: 070612124003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6606	Detected and Quantified	F	Actual				6/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	65.51623 µeq/L	Detected and Quantified	F	Actual				6/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	23.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	85.11967 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	46.89165 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	76.53317 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	9.90874 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	170.84569 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	1.4205 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	2.21251 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	101.09317 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	26.81028 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	219.87373 µeq/L	Detected and Quantified	F	Actual		3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N				
SAA_MET_IC2_GRAB	195.63219 µeq/L	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				
IONRATIO_MET_IC2_GRAB	0.88975	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** NFDR **Visit Date:** 6/19/2007 11:55 AM EDT

Activity: 070619115501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	16.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070619115502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.66 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.67 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.67 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.66 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.66 volts	Detected and Quantified	F	Actual								

Activity: 070619115503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5821	Detected and Quantified	F	Actual				6/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	75.63322 µeq/L	Detected and Quantified	F	Actual				6/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	23.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	88.52999 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	48.6151 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	80.06252 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.44547 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	178.30487 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	1.46409 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	3.7069 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	91.96521 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	28.66527 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	229.11717 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	199.9706 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.87279	Detected and Quantified	F	Actual				4/23/2008				

Dilution: N *Recovery:* N *Correction:* N

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 6/25/2007 1:00 PM EDT
Visit Comment: No sample: Water in bottle turned out to be storage DI water that was not dumped out prior to leaving UVA.

Activity: 070625130001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070625130002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.64 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.65 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.65 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.66 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.57 volts	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 7/3/2007 1:36 PM EDT

Activity: 070703133601 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.5 °C	Detected and Quantified	F	Actual								

weather	1	Detected and Quantified	F	Actual
water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	NORMAL	Detected and Quantified	F	Actual

Activity: 070703133602 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No
Activity Comment: Replaced 2 of the Stevens batteries

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.60 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.60 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.60 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.66 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.45 volts	Detected and Quantified	F	Actual								

Activity: 070703133603 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.549	Detected and Quantified	F	Actual				7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	88.49557 µeq/L	Detected and Quantified	F	Actual				7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	24.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	92.40778 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	50.59461 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	83.54776 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.86617 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	190.74555 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	8.24607 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	3.33381 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	91.85999 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	30.40901 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	245.66239 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	214.09838 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.87151	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** NFDR **Visit Date:** 7/10/2007 12:36 PM EDT

Activity: 070710123601 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	22.0 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070710123602 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.55 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.56 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.56 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.96 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.69 volts	Detected and Quantified	F	Actual								

Activity: 070710123603 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5887	Detected and Quantified	F	Actual				7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	102.42115 µeq/L	Detected and Quantified	F	Actual				7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	26.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	102.39148 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	55.58013 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	88.48635 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	12.20352 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	201.12362 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	3.26394 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	12.73114 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	83.563 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	31.51251 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	261.92542 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	230.2278 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.87898	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** NFDR **Visit Date:** 7/17/2007 1:23 PM EDT

Activity: 070717132301 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	21.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070717132302 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.55 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.57 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.56 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.94 volts	Detected and Quantified	F	Actual								

voltage_solarLoad	12.68 volts	Detected and Quantified	F	Actual

Activity: 070717132303 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6178	Detected and Quantified	F	Actual				7/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	94.19924 µeq/L	Detected and Quantified	F	Actual				7/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	26 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	100.0847 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	54.79593 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	89.12384 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	12.21454 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	201.89278 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	1.39109 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	20.65372 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	90.55866 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	32.34777 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	257.6101 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	237.75939 µeq/L	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				
IONRATIO_MET_IC2_GRAB	0.92294	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 7/25/2007 3:18 PM EDT

Activity: 070725151801 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	20.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070725151802 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.54 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.57 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.56 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.92 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.49 volts	Detected and Quantified	F	Actual								

Activity: 070725151803 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6176	Detected and Quantified	F	Actual				7/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	90.9793 µeq/L	Detected and Quantified	F	Actual			7/26/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	25.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	7/26/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	99.79856 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	54.76336 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	87.3336 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	11.96895 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	196.89428 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.83961 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	24.90093 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	89.60907 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	31.2995 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	254.70408 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	236.7888 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.92966	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070725151804 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 070725151805 **Activity Type:** Quality Control Sample-Trip Blank **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** Yes
Activity Comment: Blank QC sample

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7457	Detected and Quantified	F	Actual				7/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	1.93896 µeq/L	Detected and Quantified	F	Actual				7/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	*Present <QL	*Present <QL	F	Actual	0.162 uS/cm	0.515 uS/cm		7/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Result Comment: Reported value of '0.5'.												
Ca_Ions_Grab	1.65463 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	1.00203 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	0.3878 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	0.42894 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	*Non-detect	*Non-detect	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Result Comment: Reported value of '0.46498857602714'.												
NH4_Ions_Grab	0.19218 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	2.26484 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	0.48716 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	3.66558 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	4.73146 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	1.29078	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 070725151806 **Activity Type:** Quality Control Sample-Trip Blank **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** Yes
Activity Comment: Blank QC sample

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 8/1/2007 1:30 PM EDT

Activity: 070801133001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	22.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070801133002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.50 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.52 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.51 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.89 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.87 volts	Detected and Quantified	F	Actual								

Activity: 070801133003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5894	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	102.69399 µeq/L	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	26.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	105.40822 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	57.39586 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	94.3434 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	13.16733 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	210.26416 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	32.12572 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	90.09218 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	33.87647 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	270.32131 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	258.78836 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.95734	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 070801133004 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 8/7/2007 12:18 PM EDT

Activity: 070807121801 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	20.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070807121802 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.53 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.50 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.52 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.89 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.73 volts	Detected and Quantified	F	Actual								

Activity: 070807121803 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6657	Detected and Quantified	F	Actual				8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	103.56715 µeq/L	Detected and Quantified	F	Actual				8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	27.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	107.82748 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	58.34976 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	93.92562 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	13.5317 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	211.80528 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	4.27063 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	13.85427 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	84.72235 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	32.76535 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	277.90519 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	234.90912 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.84529	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** NFDR **Visit Date:** 8/14/2007 12:20 PM EDT

Activity: 070814122001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	19.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070814122002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.50 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.53 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.53 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.87 volts	Detected and Quantified	F	Actual								

voltage_solarLoad	12.6 volts	Detected and Quantified	F	Actual

Activity: 070814122003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.448	Detected and Quantified	F	Actual				8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	101.07289 µeq/L	Detected and Quantified	F	Actual				8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	25.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	106.02225 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	60.15189 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	91.19683 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	13.04882 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	206.79763 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	2.75809 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	29.30696 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	93.31982 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	29.99243 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	273.17788 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	253.6921 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.92867	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 8/21/2007 1:54 PM EDT

Activity: 070821135401 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070821135402 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	*Not Reported	*Not Reported	F	Actual								
WatLev_Chart	0.62 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.62 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.85 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.47 volts	Detected and Quantified	F	Actual								

Activity: 070821135403 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5863	Detected and Quantified	F	Actual				8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	94.87762 µeq/L	Detected and Quantified	F	Actual			8/23/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	25.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	8/23/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	100.624 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	54.77429 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	87.22465 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	12.83025 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	194.09881 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	23.94892 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	94.4844 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	28.29892 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	255.45969 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	241.60986 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94578	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 8/27/2007 1:15 PM EDT

Activity: 070827131501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070827131502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.63 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.64 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.64 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.83 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.76 volts	Detected and Quantified	F	Actual								

Activity: 070827131503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6554	Detected and Quantified	F	Actual				8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	96.82303 µeq/L	Detected and Quantified	F	Actual				8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	24.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	98.26825 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	53.17322 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	87.36701 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	12.54038 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	199.09917 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.52986 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	16.71002 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	94.7616 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	26.14371 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	251.87872 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	234.43836 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93076	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** NFDR **Visit Date:** 9/7/2007 1:44 PM EDT

Activity: 070907134401 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	19.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								

flow_streamStage	NORMAL	Detected and Quantified	F	Actual

Activity: 070907134402 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.51 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.52 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.51 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.81 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.46 volts	Detected and Quantified	F	Actual								

Activity: 070907134403 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5153	Detected and Quantified	F	Actual				9/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	112.45815 µeq/L	Detected and Quantified	F	Actual				9/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	25.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		9/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	105.87938 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	57.47795 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	94.65234 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	13.12607 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	213.73206 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	0.99728 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	24.35618 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	91.8817 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	28.59673 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	272.13302 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	257.29276 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94547	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** NFDR **Visit Date:** 9/11/2007 11:40 AM EDT

Activity: 070911114001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Suzanne Maben **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	20.0 °C	Detected and Quantified	F	Actual								
weather	8	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 070911114002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Suzanne Maben **QC Sample?:** No

Activity Comment: Problem with solar controller-got wet, may have lost a few data points. AXSYS had reset before I read it.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.51 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.51 ft	Detected and Quantified	F	Actual								

WatLev_AXSYS	*Not Reported	*Not Reported	F	Actual
voltage_StevensClock	8.81 volts	Detected and Quantified	F	Actual
voltage_solarLoad	12.35 volts	Detected and Quantified	F	Actual

Activity: 070911114003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Suzanne Maben **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.3882	Detected and Quantified	F	Actual				9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	115.75688 µeq/L	Detected and Quantified	F	Actual				9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	27 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	110.59013 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	59.24085 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	92.0072 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	15.63289 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	204.87238 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.25498 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	24.4557 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	88.75417 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	28.7039 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	277.72605 µeq/L	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				
SAA_MET_IC2_GRAB	257.67065 µeq/L	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				
IONRATIO_MET_IC2_GRAB	0.92779	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** NFDR **Visit Date:** 9/20/2007 3:05 PM EDT

Activity: 070920150501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Suzanne Maben\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 070920150502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Suzanne Maben\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.48 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.49 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.48 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.77 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.17 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070920150503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Suzanne Maben\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4842	Detected and Quantified	F	Actual				9/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	102.99066 µeq/L	Detected and Quantified	F	Actual				9/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	26.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		9/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	103.59492 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	56.82159 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	92.1282 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	11.74321 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	205.64243 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	1.64828 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	29.38528 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	90.00523 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	30.06831 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	265.9362 µeq/L	Detected and Quantified	F	Actual				12/1/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	252.44948 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.94929	Detected and Quantified	F	Actual				12/1/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 9/25/2007 1:04 PM EDT

Activity: 070925130401 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr.\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 070925130402 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr.\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.46 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.46 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.47 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.76 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.73 volts	Detected and Quantified	F	Actual								

Activity: 070925130403 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr.\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5158	Detected and Quantified	F	Actual				9/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	115.40456 µeq/L	Detected and Quantified	F	Actual				9/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	27.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	9/27/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	110.30337 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	60.31733 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	96.12436 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/25/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
K_Ions_Grab	12.51743 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	213.47322 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/23/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.43248 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	32.94406 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	89.23723 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	30.64792 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	279.69497 µeq/L	Detected and Quantified	F	Actual			12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	268.23377 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95902	Detected and Quantified	F	Actual			12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 10/2/2007 4:18 PM EDT

Activity: 071002161801 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071002161802 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.46 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.47 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.47 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.75 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.51 volts	Detected and Quantified	F	Actual								

Activity: 071002161803 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.48	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	115.01843 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	27.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	109.43483 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	60.65262 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	96.24999 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/10/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
K_Ions_Grab	12.70892 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	212.57594 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.40827 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	31.6278 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	90.15159 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	31.61316 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	279.45463 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	268.41098 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96048	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** NFDR **Visit Date:** 10/9/2007 2:30 PM EDT

Activity: 071009143001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	19.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071009143002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: AXSYS height not accurate (499.99) - had to reset.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.44 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.45 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	*Not Reported	*Not Reported	F	Actual								
voltage_StevensClock	8.73 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.45 volts	Detected and Quantified	F	Actual								

Activity: 071009143003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6211	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	125.88356 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	28.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/11/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	113.76259 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	62.20358 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	99.8453 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	13.53893 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	222.431 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.77168 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	27.89687 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	89.69832 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	32.92436 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	290.12208 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	276.40311 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95271	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 10/15/2007 1:30 PM EDT

Activity: 071015133001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071015133002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Had to adjust AXSYS height

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.45 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.45 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.45 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.71 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.63 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071015133003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4905	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	121.96406 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	27.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	110.454 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	61.46686 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	97.04964 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	12.25062 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	212.07077 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.60675 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	27.80275 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	89.28536 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	33.37425 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	281.82787 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	272.42642 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.96664	Detected and Quantified	F	Actual				4/23/2008				

Dilution: N *Recovery:* N *Correction:* N

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** NFDR **Visit Date:** 10/22/2007 2:35 PM EDT

Activity: 071022143501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071022143502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.47 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.48 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.48 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.70 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.48 volts	Detected and Quantified	F	Actual								

Activity: 071022143503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6911	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	117.58173 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	29.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/25/2007				

Dilution: N *Recovery:* N *Correction:* N

Ca_Ions_Grab	113.36794 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	62.63792 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	97.66274 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/11/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
K_Ions_Grab	12.88147 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	211.68113 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	22.21033 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	89.51688 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	36.44745 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	286.55657 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	265.75639 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.92741	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** NFDR **Visit Date:** 10/30/2007 2:50 PM EDT

Activity: 071030145001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.0 °C	Detected and Quantified	F	Actual								

weather	0	Detected and Quantified	F	Actual
water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	LOW	Detected and Quantified	F	Actual

Activity: 071030145002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.60 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.61 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.13 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.68 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.65 volts	Detected and Quantified	F	Actual								

Activity: 071030145003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5508	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	76.50129 µeq/L	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	26.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	104.00631 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	58.94332 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	88.5569 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	12.28678 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	182.72179 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008	
Dilution: N	*Recovery:* N	*Correction:* N							
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/11/2008	
Dilution: N	*Recovery:* N	*Correction:* N							
NO3_Ions_Grab	39.61821 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		4/11/2008	
Dilution: N	*Recovery:* N	*Correction:* N							
SO4_Ions_Grab	95.08797 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/11/2008	
Dilution: N	*Recovery:* N	*Correction:* N							
Cl_Ions_Grab	36.93101 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/11/2008	
Dilution: N	*Recovery:* N	*Correction:* N							
SBC_IC2_GRAB	263.79981 µeq/L	Detected and Quantified	F	Actual				12/1/2008	
Dilution: N	*Recovery:* N	*Correction:* N							
SAA_MET_IC2_GRAB	248.13848 µeq/L	Detected and Quantified	F	Actual				4/23/2008	
Dilution: N	*Recovery:* N	*Correction:* N							
IONRATIO_MET_IC2_GRAB	0.94063	Detected and Quantified	F	Actual				12/1/2008	
Dilution: N	*Recovery:* N	*Correction:* N							

Activity: 071030145004 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 11/5/2007 3:25 PM EST

Activity: 071105152501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Took flow measurement; had trouble finding good location, got poor readings, did not take repeat.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								

water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	LOW	Detected and Quantified	F	Actual

Activity: 071105152502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: No replacement solar battery. All chargers were occupied.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	*Not Reported	*Not Reported	F	Actual								
WatLev_Chart	0.57 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.57 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.65 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.43 volts	Detected and Quantified	F	Actual								

Activity: 071105152503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5791	Detected and Quantified	F	Actual				11/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	85.57551 µeq/L	Detected and Quantified	F	Actual				11/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	26.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	99.30313 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	56.0268 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	86.02627 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	11.0667 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	183.52801 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	23.28483 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	95.60483 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	35.59034 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	252.4294 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	240.05551 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95098	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071105152504 **Activity Type:** Quality Control Sample-Trip Blank **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** Yes

Activity Comment: Blank QC sample

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7127	Detected and Quantified	F	Actual				11/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	0.18703 µeq/L	Detected and Quantified	F	Actual				11/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	*Present <QL	*Present <QL	F	Actual	0.162 uS/cm	0.515 uS/cm		11/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Result Comment: Reported value of '0.5'.												
Ca_Ions_Grab	1.73561 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	1.08099 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	0.3939 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	0.44225 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	*Non-detect	*Non-detect	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Result Comment: Reported value of '0.42067587013413'.							
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	2.41832 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	0.4801 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	3.65925 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	3.12595 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.85426	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071105152505 **Activity Type:** Quality Control Sample-Trip Blank **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** Yes

Activity Comment: Blank QC sample

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	*Present <QL	*Present <QL	F	Actual	1.524 ug/l	4.845 ug/l		9/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
Result Comment: Reported value of '2.32026825436927'.												

O_AL_TC_Grab	*Present <QL	*Present <QL	F	Actual	1.524 ug/l	4.845 ug/l		11/5/2008					
Dilution: N	*Recovery:* N	*Correction:* N											
Detect/Quant Lim Description: set 12/17/07													
Result Comment: Reported value of '3.2540474546445'.													
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual									

Activity: 071105152506 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
discharge velocity	0.20632 ft/sec	Detected and Quantified	F	Calculated								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 11/12/2007 3:45 PM EST

Activity: 071112154501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071112154502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.58 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.58 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.58 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.63 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.29 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071112154503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4954	Detected and Quantified	F	Actual				11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	86.56616 µeq/L	Detected and Quantified	F	Actual				11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	24.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	95.68457 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	54.0957 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	84.64618 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.69286 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	180.19826 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	17.38137 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	96.59576 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	34.74677 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	245.12581 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	235.29006 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.95987	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 11/20/2007 3:05 PM EST

Activity: 071120150501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071120150502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Reset AXSYS height

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.64 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.65 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.65 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.61 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.45 volts	Detected and Quantified	F	Actual								

Activity: 071120150503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6303	Detected and Quantified	F	Actual				11/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	83.41792 µeq/L	Detected and Quantified	F	Actual				11/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	25.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	11/21/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	93.46643 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	52.98684 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	82.74515 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	10.81459 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	176.08789 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	10.34246 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	100.54891 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	33.86782 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	240.01951 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	228.17711 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95066	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** NFDR **Visit Date:** 11/27/2007 3:20 PM EST

Activity: 071127152001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071127152002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Re-adjusted AXSYS height

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.65 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.65 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.65 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.60 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.88 volts	Detected and Quantified	F	Actual								

Activity: 071127152003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6369	Detected and Quantified	F	Actual				11/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	90.78879 µeq/L	Detected and Quantified	F	Actual				11/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	24.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	93.91071 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	53.2868 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	82.59596 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	11.49519 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	175.69659 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	8.8653 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	101.99305 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	33.26139 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	241.29516 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	234.90853 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97353	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** NFDR **Visit Date:** 12/3/2007 4:30 PM EST

Activity: 071203163001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	4.5 °C	Detected and Quantified	F	Actual								

weather	1	Detected and Quantified	F	Actual
water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	LOW	Detected and Quantified	F	Actual

Activity: 071203163002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.63 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.63 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.64 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.59 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.64 volts	Detected and Quantified	F	Actual								

Activity: 071203163003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6244	Detected and Quantified	F	Actual				12/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	82.19689 µeq/L	Detected and Quantified	F	Actual				12/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	23.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		12/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	89.78985 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	51.51387 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	79.97966 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.29583 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	170.80774 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	8.197 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	101.20576 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	32.53895 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	231.58571 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	224.1386 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96784	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** NFDR **Visit Date:** 12/10/2007 4:45 PM EST

Activity: 071210164501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9.0 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071210164502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.67 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.67 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.67 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	*Not Reported	*Not Reported	F	Actual								
voltage_solarLoad	12.60 volts	Detected and Quantified	F	Actual								

Activity: 071210164503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6959	Detected and Quantified	F	Actual				12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	85.6976 µeq/L	Detected and Quantified	F	Actual				12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	24.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	91.05724 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	51.80172 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	80.81485 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.79079 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	170.13927 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	10.05471 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	101.86277 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	32.4487 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	234.4711 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	230.06378 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9812	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** NFDR **Visit Date:** 12/18/2007 4:10 PM EST

Activity: 071218161001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	5.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 071218161002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.80 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.80 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.80 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.54 volts	Detected and Quantified	F	Actual								

voltage_solarLoad	12.60 volts	Detected and Quantified	F	Actual

Activity: 071218161003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5806	Detected and Quantified	F	Actual				12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	46.64181 µeq/L	Detected and Quantified	F	Actual				12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	25.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	89.88086 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
Mg_Ions_Grab	52.2796 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
Na_Ions_Grab	75.28838 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
K_Ions_Grab	10.15258 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
SiO2_TC_Grab	154.33707 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
NO3_Ions_Grab	33.67639 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	112.48126 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
Cl_Ions_Grab	28.71259 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SBC_IC2_GRAB	227.60792 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	221.51205 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97322	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** NFDR **Visit Date:** 12/27/2007 2:15 PM EST

Activity: 071227141501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071227141502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	*Not Reported	*Not Reported	F	Actual								
WatLev_Chart	0.82 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.82 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.52 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.5 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071227141503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2957	Detected and Quantified	F	Actual				1/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	41.41863 µeq/L	Detected and Quantified	F	Actual				1/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	22.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: estimated 1/8/08												
Ca_Ions_Grab	79.97052 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
Mg_Ions_Grab	46.29418 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
Na_Ions_Grab	70.66275 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
K_Ions_Grab	8.4928 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
SiO2_TC_Grab	147.32811 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
NO3_Ions_Grab	18.21078 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		4/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												

SO4_Ions_Grab	114.43867 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
Cl_Ions_Grab	28.33629 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SBC_IC2_GRAB	205.42675 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	202.40437 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.98529	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PAIN **Visit Date:** 1/2/2007 10:15 AM EST

Visit Comment: FAD
//clear, cool
some rain
//

Activity: 070102101501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.5592	Detected and Quantified	F	Actual				1/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	5.13081 µeq/L	Detected and Quantified	F	Actual				1/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	20.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/4/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	28.99324 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	51.6469 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	22.07006 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/8/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	43.47441 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/8/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	87.416 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/8/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	8/8/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	109.62665 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/8/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.39919 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/8/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	146.19111 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	136.19715 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93164	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07010210150F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	6.5 °C	Detected and Quantified	F	Actual				1/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 1/9/2007 11:20 AM EST
Visit Comment: FAD //slow rise in hydrograph, for two days, still rising
//clear, cold
mild, rain

Activity: 070109112001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.5736	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	3.77867 µeq/L	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	20.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/11/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	29.94786 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	51.13503 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	21.94892 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	43.82476 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	88.993 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	110.09194 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.63397 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	146.86307 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	135.54508 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.92294	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07010911200F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7 °C	Detected and Quantified	F	Actual				1/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 1/16/2007 10:50 AM EST
Visit Comment: FAD //
//cloudy, cold
mild, fairly dry

Activity: 070116105001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.6617	Detected and Quantified	F	Actual				1/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	4.81044 µeq/L	Detected and Quantified	F	Actual				1/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	20.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/18/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	27.89182 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	49.90596 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	22.1934 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	43.79489 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	81.224 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	110.60487 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.7391 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	143.79257 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	137.19491 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95412	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07011610500F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	8.5 °C	Detected and Quantified	F	Actual				1/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 1/23/2007 10:45 AM EST
Visit Comment: FAD //
//cloudy, cold
light snow

Activity: 070123104501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.6178	Detected and Quantified	F	Actual				1/25/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	4.27791 µeq/L	Detected and Quantified	F	Actual				1/25/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/25/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	28.85471 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	51.57999 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	22.06058 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	40.38782 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	75.796 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	109.72944 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.1451 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	142.8896 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	135.19295 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.94614	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07012310450F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	4.5 °C	Detected and Quantified	F	Actual				1/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 1/30/2007 11:30 AM EST
Visit Comment: FAD // //cloudy, cold.
cold, dry.

Activity: 070130113001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7215	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	4.91251 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	29.08394 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	51.61051 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	21.92808 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	38.28837 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	72.393 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	110.45947 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.19004 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	11.604 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/17/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	140.9174 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	136.60252 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96938	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07013011300F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	1.5 °C	Detected and Quantified	F	Actual				1/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 2/6/2007 10:40 AM EST
Visit Comment: FAD // ice forming in well. stream iced over.

//brutally cold.

Dry, getting colder.

Activity: 070206104001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.6531	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	5.41364 µeq/L	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	20.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/8/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	30.60306 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	55.22289 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	23.13511 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	39.11888 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	75.812 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	1.56236 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	115.69606 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	22.28534 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	148.08644 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	144.9574 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.97887	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07020610400F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	0 °C	Detected and Quantified	F	Actual				2/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 2/14/2007 10:50 AM EST
Visit Comment: FAD // staff iced in, pen not writing

//cold today

wintry mix last night

Activity: 070214105001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7447	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	5.03779 µeq/L	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	29.03843 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	51.77646 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	20.92347 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	36.87188 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	70.085 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	3.52487 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	104.43095 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	20.0264 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	138.61674 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	133.02001 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95962	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07021410500F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	0.5 °C	Detected and Quantified	F	Actual				2/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 2/20/2007 10:35 AM EST
Visit Comment: FAD // staff iced in

//cool, cloudy

cold, some snow

Activity: 070220103501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.739	Detected and Quantified	F	Actual				3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	5.52794 µeq/L	Detected and Quantified	F	Actual				3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	29.39095 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	52.94509 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	22.02201 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	38.52109 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	71.264 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	2.66024 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	110.98983 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	20.71686 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	142.88564 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	139.89487 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.97907	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07022010350F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	2 °C	Detected and Quantified	F	Actual				2/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 2/27/2007 10:35 AM EST
Visit Comment: FAD //
//clear, cool
some frozen precip

Activity: 070227103501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7053	Detected and Quantified	F	Actual				3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	5.44959 µeq/L	Detected and Quantified	F	Actual				3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	28.45005 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	52.14428 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	22.15918 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	39.89309 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	77.107 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	1.61655 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	110.75719 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	20.78788 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	142.6531 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	138.61121 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97167	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07022710350F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	4 °C	Detected and Quantified	F	Actual				2/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 3/6/2007 10:35 AM EST
Visit Comment: FAD //
//clear, cold
significant rain

Activity: 070306103501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.6932	Detected and Quantified	F	Actual				3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	3.84675 µeq/L	Detected and Quantified	F	Actual				3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	27.72951 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	50.6639 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	21.80195 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	41.05147 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	78.535 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	0.95518 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	110.63835 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	20.81463 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	141.25333 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	136.25491 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.96461	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07030610350F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	3.5 °C	Detected and Quantified	F	Actual				3/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 3/13/2007 11:45 AM EDT
Visit Comment: FAD //
//WARM, CLOUDY
dry

Activity: 070313114501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7669	Detected and Quantified	F	Actual				3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	5.50331 µeq/L	Detected and Quantified	F	Actual				3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	26.78772 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	48.72446 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	22.08586 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	41.62691 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	69.504 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	110.91894 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	20.79328 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	139.23145 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	137.25603 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.98581	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07031311450F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7 °C	Detected and Quantified	F	Actual				3/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 3/16/2007 10:00 PM EDT

Activity: 070316220001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	5.5282	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStrea m	5.20448 µeq/L	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Aut oStream	20.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_AutoStream	30.49447 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_AutoStream	52.68596 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_AutoStream	20.76104 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_AutoStream	44.50999 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_AutoStream	82.983 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_AutoStream	6.3035 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_AutoStream	108.12376 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_AutoStream	20.3869 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
T_AL_TC_AutoStream	29.306 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_AUTO	148.45796 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_AUTO	140.01864 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_AUTO	0.94315	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PAIN **Visit Date:** 3/16/2007 8:00 PM EDT

Activity: 070316200001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	5.5432	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStream	5.10885 µeq/L	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_AutoStream	20 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_AutoStream	29.91798 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_AutoStream	51.62649 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_AutoStream	20.64719 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_AutoStream	43.72045 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_AutoStream	82.021 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_AutoStream	4.35287 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_AutoStream	108.01722 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_AutoStream	20.14562 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_AutoStream	31.438 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_AUTO	145.91861 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_AUTO	137.62456 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_AUTO	0.94316	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PAIN **Visit Date:** 3/16/2007 6:00 PM EDT

Activity: 070316180001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	5.5549	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStream	5.95143 µeq/L	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_AutoStream	20 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_AutoStream	31.75515 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_AutoStream	51.02723 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_AutoStream	20.61287 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_AutoStream	43.06778 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_AutoStream	81.058 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_AutoStream	106.56249 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_AutoStream	20.72699 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_AutoStream	31.5 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_AUTO	146.46953 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_AUTO	133.28141 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_AUTO	0.90996	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PAIN **Visit Date:** 3/16/2007 4:00 PM EDT

Activity: 070316160001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	5.4913	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_AutoStrea m	7.71164 µeq/L	Detected and Quantified	F	Actual			3/21/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Aut oStream	19.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	3/21/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_AutoStream	28.5515 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_AutoStream	49.93093 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_AutoStream	20.58264 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_AutoStream	42.91731 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_AutoStream	76.808 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_AutoStream	1.94263 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_AutoStream	102.84656 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_AutoStream	20.34209 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_AutoStream	34.699 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_AUTO	141.98888 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_AUTO	132.84292 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_A UTO	0.93559	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 3/17/2007 10:00 PM EDT

Activity: 070317220001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	5.5815	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStrea m	4.42764 µeq/L	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Aut oStream	19.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_AutoStream	29.29395 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_AutoStream	52.03643 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_AutoStream	20.78406 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_AutoStream	43.08141 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_AutoStream	82.95 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_AutoStream	5.761 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_AutoStream	109.64957 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_AutoStream	20.76635 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
T_AL_TC_AutoStream	23.231 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_AUTO	145.20235 µeq/L	Detected and Quantified	F	Actual				2/6/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
SAA_MET_IC2_AUTO	140.60456 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_AUTO	0.96834	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PAIN **Visit Date:** 3/17/2007 12:00 PM EDT

Activity: 070317120001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	5.5875	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStream	3.64608 µeq/L	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_AutoStream	20.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_AutoStream	29.29149 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_AutoStream	52.53115 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_AutoStream	20.88645 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_AutoStream	43.64112 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_AutoStream	83.149 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_AutoStream	3.31904 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_AutoStream	109.92304 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_AutoStream	20.61973 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_AutoStream	24.688 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_AUTO	146.35671 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_AUTO	137.50789 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_AUTO	0.93954	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PAIN **Visit Date:** 3/17/2007 10:00 AM EDT

Activity: 070317100001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	5.5675	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStream	3.9592 µeq/L	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_AutoStream	20.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_AutoStream	29.58263 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_AutoStream	52.81872 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_AutoStream	20.82233 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_AutoStream	43.88686 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_AutoStream	82.95 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_AutoStream	1.23876 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_AutoStream	8.33883 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_AutoStream	109.92491 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_AutoStream	20.41484 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_AutoStream	24.474 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_AUTO	148.3493 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_AUTO	142.63778 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_AUTO	0.9615	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PAIN **Visit Date:** 3/17/2007 12:00 AM EDT

Activity: 070317000001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	5.5353	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_AutoStrea m	4.37882 µeq/L	Detected and Quantified	F	Actual			3/21/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Aut oStream	20.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	3/21/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_AutoStream	30.4682 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_AutoStream	52.6614 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_AutoStream	20.80283 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_AutoStream	44.0435 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_AutoStream	81.406 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_AutoStream	108.53877 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_AutoStream	20.54325 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_AutoStream	28.864 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_AUTO	147.98243 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_AUTO	133.50134 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_A UTO	0.90214	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 3/20/2007 11:00 AM EDT
Visit Comment: FAD //
//clear, mild
rain and snow at higher elevations

Activity: 070320110001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.5967	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	4.10582 µeq/L	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	28.08746 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	50.05955 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	21.35825 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	42.99601 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	79.448 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	2.2022 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	109.93938 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	20.68701 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	142.50777 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	136.93441 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.96089	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07032011000F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	8 °C	Detected and Quantified	F	Actual				3/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 3/27/2007 10:45 AM EDT
Visit Comment: FAD //
//couldy, warm spring-like

Activity: 070327104501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7124	Detected and Quantified	F	Actual				4/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	4.60147 µeq/L	Detected and Quantified	F	Actual				4/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/3/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	27.21099 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	46.8674 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	21.82323 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	44.39203 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	72.31 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	109.40317 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	20.94035 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	14.536 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/17/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	140.30015 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	134.98549 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96212	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07032710450F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11 °C	Detected and Quantified	F	Actual				3/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 4/3/2007 11:40 AM EDT
Visit Comment: FAD //
//warm, sunny
mostly dry

Activity: 070403114001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.777	Detected and Quantified	F	Actual				4/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	4.67807 µeq/L	Detected and Quantified	F	Actual				4/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/5/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	26.31246 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	46.25845 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	21.78902 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	44.12109 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	69.222 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	0.71689 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	109.1054 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.10725 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	138.48752 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	135.60761 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.9792	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07040311400F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12 °C	Detected and Quantified	F	Actual				4/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 4/10/2007 12:05 PM EDT
Visit Comment: FAD //
//clear, cool
some rain

Activity: 070410120501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7117	Detected and Quantified	F	Actual				4/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	2.80061 µeq/L	Detected and Quantified	F	Actual				4/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/16/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	26.88408 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	47.71535 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	21.83168 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	41.52048 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	61.32 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	109.14034 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	20.63231 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	13.445 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/17/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	137.95809 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	132.61376 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96126	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07041012050F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	8 °C	Detected and Quantified	F	Actual				4/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 4/18/2007 11:15 AM EDT
Visit Comment: ISCO failed. Low conductivity?

Activity: 070418111501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	ABOVE NORMAL	Detected and Quantified	F	Actual								
days_since_precip	4 days	Detected and Quantified	F	Actual								

Activity: 070418111502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No
Activity Comment: at first card copy failed. 2nd time ok.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	1.26 ft	Detected and Quantified	F	Actual								
WatLev_Chart	1.22 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	1.23 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.72 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	14.59 volts	Detected and Quantified	F	Actual								

Activity: 070418111503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.5977	Detected and Quantified	F	Actual				4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	2.6219 µeq/L	Detected and Quantified	F	Actual				4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	20.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	4/20/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	29.64755 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	49.12091 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	20.94401 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	43.62274 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	81.37561 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	110.56072 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	20.55656 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	143.34171 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	133.77968 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93329	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 4/24/2007 12:10 PM EDT

Activity: 070424121001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.0 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	8 days	Detected and Quantified	F	Actual								

Activity: 070424121002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No
Activity Comment: card was full from last week

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	1.05 ft	Detected and Quantified	F	Actual								
WatLev_Chart	1.00 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	1.02 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.73 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.17 volts	Detected and Quantified	F	Actual								

Activity: 070424121003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.8183	Detected and Quantified	F	Actual				4/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	3.59006 µeq/L	Detected and Quantified	F	Actual				4/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	27.57759 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	46.23726 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	21.74232 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	45.20195 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	70.68545 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	109.81249 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	20.99207 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	140.76562 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	134.43512 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95503	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070424121004 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	15.36744 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070424121005 **Activity Type:** Quality Control Sample-Trip Blank **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7556	Detected and Quantified	F	Actual				4/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-1.48647 µeq/L	Detected and Quantified	F	Actual				4/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	*Present <QL	*Present <QL	F	Actual	0.162 uS/cm	0.515 uS/cm		4/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Result Comment: Reported value of '0.5'.												
Ca_Ions_Grab	*Present <QL	*Present <QL	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Result Comment: Reported value of 1.07838769316036.												
Mg_Ions_Grab	1.04756 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	0.4057 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	0.44114 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	*Non-detect	*Non-detect	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Result Comment: Reported value of '-0.39057235664592'.												
NH4_Ions_Grab	0.18917 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.31 ueq/L	0.986 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	0.40607 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	3.06157 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	-0.8849 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	-0.28903	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 070424121006 **Activity Type:** Quality Control Sample-Trip Blank **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	*Non-detect	*Non-detect	F	Actual	1.524 ug/l	4.845 ug/l		7/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
Result Comment: Reported value of '1.21575143505622'.												
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 5/2/2007 11:40 AM EDT

Activity: 070502114001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	16.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	1 days	Detected and Quantified	F	Actual								

Activity: 070502114002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No
Activity Comment: staff gage looks funny

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.98 ft	Detected and Quantified	F	Actual								

WatLev_Chart	0.94 ft	Detected and Quantified	F	Actual
WatLev_AXSYS	0.95 ft	Detected and Quantified	F	Actual
voltage_StevensClock	8.75 volts	Detected and Quantified	F	Actual
voltage_solarLoad	13.45 volts	Detected and Quantified	F	Actual

Activity: 070502114003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.8175	Detected and Quantified	F	Actual				5/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	4.51943 µeq/L	Detected and Quantified	F	Actual				5/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	26.25379 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	44.39364 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	22.13486 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	46.24279 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	65.11627 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	108.46097 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.11813 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	139.03158 µeq/L	Detected and Quantified	F	Actual		3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N				
SAA_MET_IC2_GRAB	134.13903 µeq/L	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				
IONRATIO_MET_IC2_GRAB	0.96481	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PAIN **Visit Date:** 5/8/2007 12:10 PM EDT

Activity: 070508121001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070508121002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	1.03 ft	Detected and Quantified	F	Actual								
WatLev_Chart	1.00 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	1.01 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.75 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.52 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070508121003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.8522	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	5.19935 µeq/L	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	26.23516 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	45.65563 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	22.19854 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	45.38842 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	71.18007 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	109.13892 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.03726 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	139.48425 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	135.41603 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.97083	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 070508121004 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	12.22312 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 5/15/2007 11:40 AM EDT

Activity: 070515114001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070515114002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No
Activity Comment: lowered probe height to 1.14

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.92 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.93 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.93 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.75 volts	Detected and Quantified	F	Actual								

voltage_solarLoad	14.27 volts	Detected and Quantified	F	Actual

Activity: 070515114003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.8637	Detected and Quantified	F	Actual				5/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	6.34749 µeq/L	Detected and Quantified	F	Actual				5/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	26.28267 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	45.6348 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	22.50306 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	46.25344 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	69.82262 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	108.09612 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.0224 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	140.68047 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	135.50651 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.96322	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 5/22/2007 11:25 AM EDT

Activity: 070522112501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070522112502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.88 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.88 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.89 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.75 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	14.31 volts	Detected and Quantified	F	Actual								

Activity: 070522112503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.9765	Detected and Quantified	F	Actual				5/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	6.90736 µeq/L	Detected and Quantified	F	Actual			5/24/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	17.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	5/24/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	25.9912 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	45.88593 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	22.75775 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	46.30582 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	71.18007 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	108.43628 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.01156 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	140.9472 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	136.3957 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96771	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070522112504 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	11.00985 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 5/29/2007 12:10 PM EDT

Activity: 070529121001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070529121002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.84 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.85 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.85 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.73 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	14.12 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

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Activity: 070529121003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0581	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	7.96091 µeq/L	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	26.65513 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	45.76829 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	23.23597 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	47.45594 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	72.3755 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	105.86813 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.42098 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	143.12183 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	135.29052 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.94528	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 6/4/2007 10:51 AM EDT

Activity: 070604105101 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070604105102 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.88 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.90 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.90 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.73 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	14.22 volts	Detected and Quantified	F	Actual								

Activity: 070604105103 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0068	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	8.94121 µeq/L	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	17.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	6/7/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	27.55364 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	47.61164 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	23.35011 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	47.96218 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	84.78679 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	103.74768 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.17757 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	146.48407 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	133.90696 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.91414	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070604105104 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	12.56354 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 6/11/2007 10:30 AM EDT

Activity: 070611103001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070611103002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.80 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.82 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.83 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.73 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.33 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070611103003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.9222	Detected and Quantified	F	Actual				6/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	8.47812 µeq/L	Detected and Quantified	F	Actual				6/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	28.40929 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	49.33448 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	24.22186 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	49.05883 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	92.94334 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	105.01834 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	22.10435 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	151.03096 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	135.64131 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.8981	Detected and Quantified	F	Actual				4/23/2008					

Dilution: N *Recovery:* N *Correction:* N

Activity: 070611103004 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
discharge velocity	0.5589 ft/sec	Detected and Quantified	F	Calculated								

Activity: 070611103004 **Activity Type:** Quality Control Field Replicate Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
discharge velocity	0.52 ft/sec	Detected and Quantified	F	Calculated								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 6/18/2007 10:50 AM EDT

Activity: 0706181050 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No
Activity Comment: Battery status=blinking on full

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.79 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.82 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.82 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.72 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	14.11 volts	Detected and Quantified	F	Actual								

Activity: 070618105001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	19.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								

water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	NORMAL	Detected and Quantified	F	Actual

Activity: 070618105003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0144	Detected and Quantified	F	Actual				6/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	10.71948 µeq/L	Detected and Quantified	F	Actual				6/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	28.40024 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	48.1311 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	24.41242 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	49.02735 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	93.74622 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	101.24124 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	22.02622 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	149.97761 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	134.02744 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.89365	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 6/26/2007 9:30 AM EDT

Activity: 070626093001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	20.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070626093002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.75 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.83 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.83 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.72 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.4 volts	Detected and Quantified	F	Actual								

Activity: 070626093003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0924	Detected and Quantified	F	Actual				6/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	12.38508 µeq/L	Detected and Quantified	F	Actual			6/27/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	18 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	6/27/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	26.89447 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	49.38793 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	24.85741 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	49.59321 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	97.83116 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	4.08042 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	101.14244 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.14512 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	150.73952 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	139.75306 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.92712	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 7/4/2007 11:04 AM EDT

Activity: 070704110401 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070704110402 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No
Activity Comment: Changed solar battery, but now only @ 12.6v

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.77 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.82 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.84 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.72 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.35 volts	Detected and Quantified	F	Actual								

Activity: 070704110403 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.9341	Detected and Quantified	F	Actual				7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	16.88256 µeq/L	Detected and Quantified	F	Actual				7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	25.8846 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	47.04485 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	24.99162 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	49.70129 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	99.38854 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	102.74636 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.11551 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	147.62886 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	141.78493 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96041	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PAIN **Visit Date:** 7/9/2007 11:50 AM EDT

Activity: 070709115001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	25.0 °C	Detected and Quantified	F	Actual								

weather	1	Detected and Quantified	F	Actual
water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	NORMAL	Detected and Quantified	F	Actual

Activity: 070709115002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No
Activity Comment: Replaced solar battery, but only @ 12.71 now

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.75 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.82 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.83 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.72 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.7 volts	Detected and Quantified	F	Actual								

Activity: 070709115003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0276	Detected and Quantified	F	Actual				7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	18.08335 µeq/L	Detected and Quantified	F	Actual				7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	26.4202 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	47.38119 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	24.98386 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	50.23095 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	101.14138 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	100.25425 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.92285 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	149.0227 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	140.30095 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94147	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PAIN **Visit Date:** 7/18/2007 11:56 AM EDT

Activity: 070718115601 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	24.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070718115602 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.72 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.81 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.83 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.71 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.19 volts	Detected and Quantified	F	Actual								

Activity: 070718115603 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.1473	Detected and Quantified	F	Actual				7/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	15.42208 µeq/L	Detected and Quantified	F	Actual				7/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	27.45075 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	46.54874 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	25.51345 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	51.11417 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	105.81974 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	3.68702 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	100.46468 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.78183 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	150.63361 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	142.35561 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94505	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 7/24/2007 2:00 PM EDT

Activity: 070724140001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	22.0 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 070724140002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.70 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.80 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.82 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.70 volts	Detected and Quantified	F	Actual								

voltage_solarLoad	13.28 volts	Detected and Quantified	F	Actual

Activity: 070724140003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.1048	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	13.05597 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	17.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	25.0211 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	45.93404 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	25.5387 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	49.67399 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	103.96589 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	102.58076 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	22.67453 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	146.17433 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	138.35176 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.94648	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 7/31/2007 12:00 PM EDT

Activity: 070731120001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	23.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070731120002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.70 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.79 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.82 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.70 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.11 volts	Detected and Quantified	F	Actual								

Activity: 070731120003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2164	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	15.36756 µeq/L	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	17.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	8/2/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	26.30923 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	46.30865 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	25.51481 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	51.22267 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	129.3003 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.86143 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	98.96683 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.71227 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	149.36186 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	137.90809 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.92332	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070731120004 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 8/8/2007 9:40 AM EDT

Activity: 070808094001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	21.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070808094002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.73 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.79 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.82 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.70 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.92 volts	Detected and Quantified	F	Actual								

Activity: 070808094003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.138	Detected and Quantified	F	Actual				8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	19.85328 µeq/L	Detected and Quantified	F	Actual				8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	26.8876 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	49.10678 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	27.95512 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	53.98081 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	113.03677 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	98.42731 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	24.93518 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	157.93681 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	143.25627 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.90705	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PAIN **Visit Date:** 8/15/2007 11:50 AM EDT

Activity: 070815115001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	19.0 °C	Detected and Quantified	F	Actual								

weather	1	Detected and Quantified	F	Actual
water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	NORMAL	Detected and Quantified	F	Actual

Activity: 070815115002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.70 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.80 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.81 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.70 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.40 volts	Detected and Quantified	F	Actual								

Activity: 070815115003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.9815	Detected and Quantified	F	Actual				8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	14.42963 µeq/L	Detected and Quantified	F	Actual				8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	26.93487 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	48.60408 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	26.45207 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	50.92907 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	111.6969 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	2.46731 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	2.27754 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	104.50624 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.89777 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	155.3874 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	144.11118 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.92743	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PAIN **Visit Date:** 8/22/2007 1:30 PM EDT

Activity: 070822133001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	23.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070822133002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.70 ft	Detected and Quantified	F	Actual								

WatLev_Chart	0.80 ft	Detected and Quantified	F	Actual
WatLev_AXSYS	0.81 ft	Detected and Quantified	F	Actual
voltage_StevensClock	8.68 volts	Detected and Quantified	F	Actual
voltage_solarLoad	13.49 volts	Detected and Quantified	F	Actual

Activity: 070822133003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.163	Detected and Quantified	F	Actual				8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	16.07712 µeq/L	Detected and Quantified	F	Actual				8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	26.78995 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	45.85454 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	25.42458 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	52.97302 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	117.48784 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.20013 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	2.88205 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	99.87543 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Cl_Ions_Grab	22.29856 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	151.24222 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	141.13316 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93316	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PAIN **Visit Date:** 8/29/2007 10:50 AM EDT

Activity: 070829105001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	21.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070829105002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.79 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.83 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.84 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.68 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.05 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070829105003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.1581	Detected and Quantified	F	Actual				8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	14.26132 µeq/L	Detected and Quantified	F	Actual				8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	27.58346 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	47.4264 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	26.12121 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	53.83791 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	114.98173 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	111.14894 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.23358 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	154.97548 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	146.68434 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.9465	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 9/5/2007 11:05 AM EDT

Activity: 070905110501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070905110502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.73 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.82 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.83 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.67 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.97 volts	Detected and Quantified	F	Actual								

Activity: 070905110503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.1302	Detected and Quantified	F	Actual				9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	16.91773 µeq/L	Detected and Quantified	F	Actual				9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	17.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	25.53337 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	48.06342 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	26.43592 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	52.91081 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	117.10217 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.30127 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	105.23216 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.72852 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	153.24479 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	143.91891 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93914	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 9/12/2007 10:35 AM EDT

Activity: 070912103501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070912103502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.74 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.83 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.83 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.67 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.85 volts	Detected and Quantified	F	Actual								

Activity: 070912103503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.177	Detected and Quantified	F	Actual				9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	19.60487 µeq/L	Detected and Quantified	F	Actual				9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	27.14619 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	48.54697 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	25.6064 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	53.26313 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	120.76762 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.75454 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	99.30273 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.28933 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	154.56919 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	141.95147 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.91837	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PAIN **Visit Date:** 9/19/2007 10:28 AM EDT

Activity: 070919102801 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								

flow_streamStage	NORMAL	Detected and Quantified	F	Actual

Activity: 070919102802 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.75 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.80 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.82 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.65 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.74 volts	Detected and Quantified	F	Actual								

Activity: 070919102803 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0555	Detected and Quantified	F	Actual				9/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	17.85951 µeq/L	Detected and Quantified	F	Actual				9/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		9/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	26.31909 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	49.41132 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	26.21258 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	51.26984 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	115.55991 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	101.93799 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.61869 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	153.21933 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	141.45669 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.92323	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070919102804 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Suzanne Maben\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 9/26/2007 11:07 AM EDT

Activity: 070926110701 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070926110702 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.70 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.81 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.82 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.64 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.73 volts	Detected and Quantified	F	Actual								

Activity: 070926110703 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.1883	Detected and Quantified	F	Actual				9/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	20.38116 µeq/L	Detected and Quantified	F	Actual				9/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		9/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	25.33415 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	49.13903 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	26.58984 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	54.40879 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	118.66883 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.29083 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	103.14327 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	22.03295 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	155.76264 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	145.59788 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.93474	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PAIN **Visit Date:** 10/3/2007 10:05 AM EDT

Activity: 071003100501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Suzanne Maben\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071003100502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Suzanne Maben\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.69 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.80 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.81 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.62 volts	Detected and Quantified	F	Actual								

voltage_solarLoad	12.56 volts	Detected and Quantified	F	Actual

Activity: 071003100503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Suzanne Maben\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.1054	Detected and Quantified	F	Actual				10/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	23.2131 µeq/L	Detected and Quantified	F	Actual				10/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	26.50773 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	51.45292 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	27.66754 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	54.4129 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	120.01497 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.30933 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	4.45477 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	102.82297 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	23.28952 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	160.35042 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	136.67266 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.85234	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 071003100504 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Suzanne Maben\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071003100505 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
discharge velocity	0.0552 ft/sec	Detected and Quantified	F	Calculated								

Activity: 071003100505 **Activity Type:** Quality Control Field Replicate Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
discharge velocity	0.0736 ft/sec	Detected and Quantified	F	Calculated								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 10/8/2007 10:47 AM EDT

Activity: 071008104701 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071008104702 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.69 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.80 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.81 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.62 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.72 volts	Detected and Quantified	F	Actual								

Activity: 071008104703 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.584	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	25.00989 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	19.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/11/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	28.27244 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	53.22527 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	26.72224 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	57.26662 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	122.74979 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.53458 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	5.79259 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	101.13687 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.55097 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	166.02115 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	154.49032 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93055	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 10/16/2007 10:30 AM EDT

Activity: 071016103001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071016103002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.74 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.79 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.80 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.60 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.47 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071016103003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.986	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	30.56333 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	18.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	28.93816 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	53.89592 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	26.8817 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	53.4807 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	122.28057 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	1.81854 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	101.02102 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	23.12165 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	163.20298 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	156.52454 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.95908	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 071016103004 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	5.52961 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		9/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071016103005 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
discharge velocity	0.091 ft/sec	Detected and Quantified	F	Calculated								

Activity: 071016103005 **Activity Type:** Quality Control Field Replicate Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
discharge velocity	0.1024 ft/sec	Detected and Quantified	F	Calculated								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 10/23/2007 9:30 AM EDT

Activity: 071023093001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								

flow_streamStage	LOW	Detected and Quantified	F	Actual

Activity: 071023093002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Changed AXSYS height

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.78 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.79 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.79 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.59 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.64 volts	Detected and Quantified	F	Actual								

Activity: 071023093003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2199	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	33.35376 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	20 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/25/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	28.79879 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	53.81487 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	26.76522 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	58.65663 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	124.22711 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	101.83379 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	25.28447 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	168.04201 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	160.51252 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.95519	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 10/29/2007 10:45 AM EDT
Visit Comment: 3 days of rain since last week.

Activity: 071029104501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Flow going over entire rock reach.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 071029104502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Battery low; replacement battery in field lab was not fully charged.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.85 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.85 ft	Detected and Quantified	F	Actual								

WatLev_AXSYS	0.86 ft	Detected and Quantified	F	Actual
voltage_StevensClock	8.58 volts	Detected and Quantified	F	Actual
voltage_solarLoad	12.44 volts	Detected and Quantified	F	Actual

Activity: 071029104503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0371	Detected and Quantified	F	Actual				10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	14.81498 µeq/L	Detected and Quantified	F	Actual				10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	28.95771 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	54.03815 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	26.49266 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	53.21107 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	113.35914 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	0.78973 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	117.75139 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	24.66166 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	162.70609 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	158.01776 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.97119	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 071029104504 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 11/6/2007 11:00 AM EST

Activity: 071106110001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	8.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071106110002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.79 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.82 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.83 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.55 volts	Detected and Quantified	F	Actual								

voltage_solarLoad	12.43 volts	Detected and Quantified	F	Actual

Activity: 071106110003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0651	Detected and Quantified	F	Actual				11/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	16.56257 µeq/L	Detected and Quantified	F	Actual				11/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	26.70206 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	51.54124 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	26.10596 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	52.42203 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	111.9087 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	116.26307 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	23.23131 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	156.77779 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	156.09745 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.99566	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 11/13/2007 11:20 AM EST

Activity: 071113112001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071113112002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.80 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.81 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.81 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.53 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.60 volts	Detected and Quantified	F	Actual								

Activity: 071113112003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0662	Detected and Quantified	F	Actual				11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	16.65385 µeq/L	Detected and Quantified	F	Actual			11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	18.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	28.81442 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	51.88201 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	26.01567 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	53.0487 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	111.5221 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	116.18469 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.54153 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	159.7673 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	155.42057 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97279	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071113112004 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 11/19/2007 12:00 PM EST

Activity: 071119120001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071119120002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.79 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.80 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.81 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.59 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.47 volts	Detected and Quantified	F	Actual								

Activity: 071119120003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.9943	Detected and Quantified	F	Actual				11/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	16.15064 µeq/L	Detected and Quantified	F	Actual			11/21/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	19.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	11/21/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	29.07296 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	54.42237 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	26.18263 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	51.66615 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	110.74899 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	117.20475 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.24683 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	161.35061 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	155.64272 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96462	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 11/26/2007 10:25 AM EST

Activity: 071126102501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Light rain the night before

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9.0 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071126102502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.80 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.79 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.80 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.51 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.60 volts	Detected and Quantified	F	Actual								

Activity: 071126102503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0019	Detected and Quantified	F	Actual				11/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	16.38675 µeq/L	Detected and Quantified	F	Actual				11/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	26.58204 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	52.4725 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	25.82963 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	51.59591 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	111.5221 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.81861 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	116.39666 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.11351 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	156.48658 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	155.71553 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.99507	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071126102504 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
discharge velocity	0.5656 ft/sec	Detected and Quantified	F	Calculated								

Activity: 071126102504 **Activity Type:** Quality Control Field Replicate Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
discharge velocity	0.4578 ft/sec	Detected and Quantified	F	Calculated								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 12/4/2007 12:00 PM EST

Activity: 071204120001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Windy!

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	2.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071204120002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.78 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.78 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.76 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.49 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.36 volts	Detected and Quantified	F	Actual								

Activity: 071204120003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.9389	Detected and Quantified	F	Actual				12/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	15.18252 µeq/L	Detected and Quantified	F	Actual			12/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	18.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	12/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	28.77437 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	53.69393 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	25.82167 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	48.29569 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	110.36247 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	116.59978 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.36148 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	156.59216 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	154.18428 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.98462	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 12/11/2007 10:50 AM EST

Activity: 071211105001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071211105002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.74 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.74 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.75 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.48 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.70 volts	Detected and Quantified	F	Actual								

Activity: 071211105003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0762	Detected and Quantified	F	Actual				12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	16.22063 µeq/L	Detected and Quantified	F	Actual				12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	28.84744 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	52.68451 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	25.57506 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	51.41199 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	110.28835 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	118.11741 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.5407 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	158.5255 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	155.91924 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.98356	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071211105004 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 12/17/2007 11:30 AM EST

Activity: 071217113001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	2.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071217113002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.88 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.87 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.89 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.47 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.30 volts	Detected and Quantified	F	Actual								

Activity: 071217113003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7917	Detected and Quantified	F	Actual				12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	12.91075 µeq/L	Detected and Quantified	F	Actual				12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	20.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	29.97182 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
Mg_Ions_Grab	56.8393 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
Na_Ions_Grab	25.58502 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
K_Ions_Grab	49.86276 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SiO2_TC_Grab	103.52771 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	122.74134 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
Cl_Ions_Grab	24.60073 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SBC_IC2_GRAB	162.2654 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	160.29332 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.98785	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PAIN **Visit Date:** 12/26/2007 10:30 AM EST

Activity: 071226103001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	3.0 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071226103002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.82 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.79 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.83 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.45 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.57 volts	Detected and Quantified	F	Actual								

Activity: 071226103003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.9045	Detected and Quantified	F	Actual				1/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	10.04414 µeq/L	Detected and Quantified	F	Actual				1/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: estimated 1/8/08												

Ca_Ions_Grab	31.23783 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
Mg_Ions_Grab	56.80127 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
Na_Ions_Grab	25.31692 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
K_Ions_Grab	47.33038 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SiO2_TC_Grab	100.43989 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	4/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SO4_Ions_Grab	123.98243 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
Cl_Ions_Grab	23.00644 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SBC_IC2_GRAB	160.6929 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	157.07351 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97748	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071226103004 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
T_AL_TC_Grab	10.53496 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		9/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 1/3/2007 12:30 PM EST
Visit Comment: FAD //
//clear, mild
some rain

Activity: 070103123001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.98	Detected and Quantified	F	Actual				1/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	195.28626 µeq/L	Detected and Quantified	F	Actual				1/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	33.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/4/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	131.5175 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	110.43305 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	73.57964 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	4.90662 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	200.047 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/8/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	8/8/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	74.44283 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/8/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	27.79545 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/8/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	320.44331 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	297.56504 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9286	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07010312300F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7 °C	Detected and Quantified	F	Actual				1/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 1/8/2007 8:00 AM EST

Activity: 070108080001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	7.1753	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_AutoStrea m	195.10402 µeq/L	Detected and Quantified	F	Actual			1/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Aut oStream	33.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	1/11/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_AutoStream	134.01788 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_AutoStream	111.12488 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_AutoStream	72.43713 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_AutoStream	5.26643 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_AutoStream	197.673 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_AutoStream	10.90043 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_AutoStream	75.58343 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_AutoStream	26.47755 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_AUTO	322.85282 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_AUTO	308.06543 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_A UTO	0.9542	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 1/8/2007 2:00 AM EST

Activity: 070108020001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	7.0286	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStrea m	193.01956 µeq/L	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Aut oStream	33.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/11/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_AutoStream	132.63861 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_AutoStream	109.65359 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_AutoStream	72.53864 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_AutoStream	5.40882 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_AutoStream	203.317 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_AutoStream	7.19107 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_AutoStream	73.59718 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_AutoStream	26.43617 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_AUTO	320.24616 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_AUTO	300.24398 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_AUTO	0.93754	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 1/8/2007 10:00 PM EST

Activity: 070108220001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	7.0527	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStream	194.89052 µeq/L	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_AutoStream	34.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/11/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_AutoStream	137.07416 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_AutoStream	114.81714 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_AutoStream	72.69899 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_AutoStream	5.03486 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_AutoStream	202.437 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_AutoStream	9.2926 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_AutoStream	81.89196 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_AutoStream	26.10844 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_AUTO	329.63165 µeq/L	Detected and Quantified	F	Actual				2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_AUTO	312.18352 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_AUTO	0.94707	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 1/8/2007 12:00 AM EST

Activity: 070108000001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	6.7957	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStream	194.04231 µeq/L	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_AutoStream	32.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/11/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_AutoStream	133.85233 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_AutoStream	107.53403 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_AutoStream	73.2848 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_AutoStream	6.94121 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_AutoStream	263.89 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_AutoStream	14.63248 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	8/8/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_AutoStream	10.15519 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/8/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_AutoStream	73.5212 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/8/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_AutoStream	28.11496 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/8/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_AUTO	336.24485 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_AUTO	305.83366 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_AUTO	0.90956	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 1/8/2007 6:00 PM EST

Activity: 070108180001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	7.0841	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStream	194.94146 µeq/L	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_AutoStream	34.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/11/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_AutoStream	137.13271 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_AutoStream	114.55037 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_AutoStream	72.97868 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_AutoStream	5.15532 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_AutoStream	201.839 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_AutoStream	11.42518 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_AutoStream	81.05122 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_AutoStream	26.55276 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_AUTO	329.82358 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_AUTO	313.97062 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_AUTO	0.95194	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 1/8/2007 4:00 PM EST

Activity: 070108160001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	7.1449	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_AutoStrea m	193.64893 µeq/L	Detected and Quantified	F	Actual			1/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Aut oStream	34.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	1/11/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_AutoStream	132.0339 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_AutoStream	111.59662 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_AutoStream	72.61285 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_AutoStream	4.97445 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_AutoStream	202.188 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_AutoStream	4.80524 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_AutoStream	80.29679 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_AutoStream	26.28689 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_AUTO	321.22432 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_AUTO	305.03785 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_A UTO	0.94961	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 1/8/2007 12:00 PM EST

Activity: 070108120001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	7.1119	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStrea m	190.35439 µeq/L	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Aut oStream	33.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/11/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_AutoStream	132.32048 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_AutoStream	110.0363 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_AutoStream	72.04557 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_AutoStream	5.18223 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_AutoStream	201.707 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_AutoStream	8.1191 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_AutoStream	77.05139 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_AutoStream	25.89208 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_AUTO	319.59108 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_AUTO	301.41696 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_AUTO	0.94313	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 1/8/2007 10:00 AM EST

Activity: 070108100001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	7.1336	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStream	192.45712 µeq/L	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_AutoStream	33.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/11/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_AutoStream	133.70526 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_AutoStream	110.74476 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_AutoStream	72.19814 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_AutoStream	5.25529 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_AutoStream	198.154 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_AutoStream	5.26455 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_AutoStream	75.56345 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_AutoStream	25.46272 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_AUTO	321.90995 µeq/L	Detected and Quantified	F	Actual				2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_AUTO	298.74784 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_AUTO	0.92805	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 1/9/2007 2:00 PM EST

Activity: 070109140001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	7.0659	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStream	190.20096 µeq/L	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_AutoStream	34.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/11/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_AutoStream	133.96079 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_AutoStream	112.19586 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_AutoStream	72.89473 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_AutoStream	4.85657 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_AutoStream	205.193 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_AutoStream	8.59472 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_AutoStream	82.70688 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_AutoStream	27.3747 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_AUTO	323.91445 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_AUTO	308.87726 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_AUTO	0.95358	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 1/10/2007 11:45 AM EST

Visit Comment: FAD
//
//cold, cloudy
mild, some rain

Activity: 070110114501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.0729	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	185.13767 µeq/L	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	33.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/11/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										

Ca_Ions_Grab	129.93936 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	110.29945 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	72.23532 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	4.7343 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	199.449 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	8.91658 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	80.97662 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	26.88351 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	317.21493 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	301.91438 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95177	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07011011450F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	6 °C	Detected and Quantified	F	Actual				1/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 1/17/2007 12:55 PM EST
Visit Comment: FAD //
//clear, cold
mild, then cold

Activity: 070117125501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.24	Detected and Quantified	F	Actual				1/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	197.43981 µeq/L	Detected and Quantified	F	Actual				1/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	33 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/18/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	129.70981 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	109.41292 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	74.54512 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	4.81908 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	204.097 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	65.2219 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	28.03414 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	318.49343 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	290.73635 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.91285	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07011712550F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	6 °C	Detected and Quantified	F	Actual				1/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 1/24/2007 12:10 PM EST
Visit Comment: FAD
//
//light snow
light snow

Activity: 070124121001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.0263	Detected and Quantified	F	Actual				1/25/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	188.21209 µeq/L	Detected and Quantified	F	Actual				1/25/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	32 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/25/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	125.67146 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	106.21513 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	72.59796 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	4.48056 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	200.063 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	12.03381 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	63.39814 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	28.25478 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	308.97161 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	291.89882 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94474	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07012412100F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	4.5 °C	Detected and Quantified	F	Actual				1/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 1/31/2007 11:35 AM EST
Visit Comment: FAD //looks like there was ice buildup in the well last night
//cold
cold, dry

Activity: 070131113501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.113	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	188.28549 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	31.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	120.59787 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	103.74102 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	72.66905 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	4.30223 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	203.964 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	11.42225 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	61.24082 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	29.08127 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	301.31667 µeq/L	Detected and Quantified	F	Actual				2/6/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
SAA_MET_IC2_GRAB	290.02983 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.96254	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Activity: 07013111350F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	2 °C	Detected and Quantified	F	Actual				1/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 2/7/2007 12:20 PM EST
Visit Comment: FAD //trudging across the tundra, mile after mile
well frozen
//cold, clear
snow last night ~4 inches

Activity: 070207122001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8668	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	179.18312 µeq/L	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	31.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/8/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	120.12268 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	102.847 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	71.55226 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	4.23027 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	198.569 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	14.84649 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	61.30725 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	29.6462 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	298.75871 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	284.98306 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95389	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07020712200F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	1 °C	Detected and Quantified	F	Actual				2/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 2/15/2007 12:50 PM EST
Visit Comment: FAD //well frozen.
//brutally cold
mixed precip on Wednesday. Several inches of frozen snow around Sperryville. Treacherous walking.

Activity: 070215125001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.0665	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	173.51112 µeq/L	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	32.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	121.95527 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	105.24113 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	69.67546 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	4.16258 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	190.734 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	11.24334 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	50.64412 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	27.84158 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	301.04094 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	263.24016 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.87443	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07021512500F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	0 °C	Detected and Quantified	F	Actual				2/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 2/21/2007 11:45 AM EST
Visit Comment: FAD //well frozen
//clearing, warmer
some snow

Activity: 070221114501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5822	Detected and Quantified	F	Actual				3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	165.05244 µeq/L	Detected and Quantified	F	Actual				3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	31.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	120.17749 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	102.48287 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	69.87917 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	4.36512 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	188.725 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	16.86612 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	60.30602 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	26.94055 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	296.91115 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	269.16513 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.90655	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07022111450F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	3 °C	Detected and Quantified	F	Actual				2/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 2/28/2007 11:55 AM EST
Visit Comment: FAD //
//clear, cool
some snow

Activity: 070228115501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.0438	Detected and Quantified	F	Actual				3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	175.47589 µeq/L	Detected and Quantified	F	Actual				3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	33.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	125.46548 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	107.30446 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	72.13738 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	4.382 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	195.78 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	17.99928 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	75.78892 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	26.6867 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	309.29582 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	295.95079 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.95685	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07022811550F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	4.5 °C	Detected and Quantified	F	Actual				2/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 3/2/2007 8:00 AM EST

Activity: 070302080001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	7.0623	Detected and Quantified	F	Actual				3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStream	166.14868 µeq/L	Detected and Quantified	F	Actual				3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_AutoStream	34 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_AutoStream	133.33778 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_AutoStream	112.42958 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_AutoStream	69.29142 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_AutoStream	4.8581 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_AutoStream	189.041 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_AutoStream	31.56553 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_AutoStream	81.09849 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_AutoStream	25.3682 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_AUTO	319.92338 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_AUTO	304.1809 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_AUTO	0.95079	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 3/2/2007 6:00 AM EST

Activity: 070302060001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	7.1381	Detected and Quantified	F	Actual				3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStream	170.7661 µeq/L	Detected and Quantified	F	Actual				3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_AutoStream	33.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										

Ca_Ions_AutoStream	129.67615 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_AutoStream	108.73489 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_AutoStream	70.61025 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_AutoStream	3.04902 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_AutoStream	245.331 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_AutoStream	0.32124 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_AutoStream	0.82429 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_AutoStream	78.84631 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_AutoStream	27.55745 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_AUTO	312.39155 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_AUTO	277.99415 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_AUTO	0.88989	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 3/2/2007 4:00 PM EST

Activity: 070302160001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	7.0966	Detected and Quantified	F	Actual				3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_AutoStrea m	157.8637 µeq/L	Detected and Quantified	F	Actual			3/8/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Aut oStream	34 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	3/8/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_AutoStream	130.99183 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_AutoStream	110.95878 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_AutoStream	66.84035 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_AutoStream	4.99692 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_AutoStream	180.824 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_AutoStream	0.40503 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_AutoStream	23.27038 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_AutoStream	84.66903 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_AutoStream	24.39428 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_AUTO	314.19291 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_AUTO	290.19739 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_A UTO	0.92363	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 3/2/2007 2:00 PM EST

Activity: 070302140001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	7.1081	Detected and Quantified	F	Actual				3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStream	158.30633 µeq/L	Detected and Quantified	F	Actual				3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_AutoStream	33.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_AutoStream	131.9527 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_AutoStream	110.79891 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_AutoStream	66.98492 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_AutoStream	5.20345 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_AutoStream	181.073 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_AutoStream	36.33397 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_AutoStream	83.73775 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_AutoStream	24.70907 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_AUTO	314.94648 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_AUTO	303.08712 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_AUTO	0.96234	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 3/2/2007 12:00 PM EST

Activity: 070302120001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	7.0169	Detected and Quantified	F	Actual				3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStream	160.38525 µeq/L	Detected and Quantified	F	Actual				3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_AutoStream	34.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_AutoStream	131.5771 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_AutoStream	111.325 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_AutoStream	67.77421 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_AutoStream	5.1001 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_AutoStream	181.787 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_AutoStream	31.24897 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_AutoStream	83.25814 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_AutoStream	24.59928 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_AUTO	315.78291 µeq/L	Detected and Quantified	F	Actual				2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_AUTO	299.49164 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_AUTO	0.94841	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 3/2/2007 10:00 AM EST

Activity: 070302100001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	7.0764	Detected and Quantified	F	Actual				3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStream	162.40543 µeq/L	Detected and Quantified	F	Actual				3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_AutoStream	33.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_AutoStream	131.67275 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_AutoStream	111.86123 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_AutoStream	68.41027 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_AutoStream	5.0726 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_AutoStream	184.044 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_AutoStream	26.58264 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_AutoStream	81.63916 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_AutoStream	24.83443 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_AUTO	317.02335 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_AUTO	295.46166 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_AUTO	0.93199	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 3/3/2007 10:00 AM EST

Activity: 070303100001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	7.0716	Detected and Quantified	F	Actual				3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStream	159.17301 µeq/L	Detected and Quantified	F	Actual				3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_AutoStream	32.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_AutoStream	127.98201 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_AutoStream	109.18681 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_AutoStream	67.13795 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_AutoStream	4.5863 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_AutoStream	184.542 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_AutoStream	29.13906 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_AutoStream	86.09255 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_AutoStream	24.97334 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_AUTO	308.89957 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_AUTO	299.37796 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_AUTO	0.96918	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 3/3/2007 6:00 AM EST

Activity: 070303060001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	7.109	Detected and Quantified	F	Actual				3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_AutoStrea m	159.64946 µeq/L	Detected and Quantified	F	Actual			3/8/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Aut oStream	33.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	3/8/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_AutoStream	129.38726 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_AutoStream	110.20931 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_AutoStream	66.79251 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_AutoStream	4.53037 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_AutoStream	184.094 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_AutoStream	27.62712 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_AutoStream	86.27996 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_AutoStream	25.21662 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_AUTO	310.92595 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_AUTO	298.77316 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_A UTO	0.96091	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 3/7/2007 12:10 PM EST
Visit Comment: FAD //
//couldy, cold
significant rain

Activity: 070307121001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.0605	Detected and Quantified	F	Actual				3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	162.8751 µeq/L	Detected and Quantified	F	Actual				3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	31.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	118.58669 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	102.53938 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	68.57972 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	4.30231 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	193.39 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	17.70668 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	75.36219 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	26.85087 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	294.0146 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	282.79484 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.96184	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07030712100F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	3 °C	Detected and Quantified	F	Actual				3/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 3/14/2007 12:35 PM EDT
Visit Comment: FAD //
//warm, cloudy
dry

Activity: 070314123501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.1399	Detected and Quantified	F	Actual				3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	182.01304 µeq/L	Detected and Quantified	F	Actual				3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	31.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	119.93669 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	101.75296 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	72.91972 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	4.86081 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	199.698 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.73862 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.7349 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	66.35524 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	27.20357 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	300.2088 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	276.30675 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.92038	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07031412350F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	8 °C	Detected and Quantified	F	Actual				3/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 3/16/2007 2:00 PM EDT

Activity: 070316140001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	7.0737	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStrea m	162.20516 µeq/L	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Aut oStream	32.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_AutoStream	129.29277 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_AutoStream	107.60862 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_AutoStream	68.06939 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_AutoStream	5.20007 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_AutoStream	184.476 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_AutoStream	25.11835 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_AutoStream	72.33352 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_AutoStream	24.57092 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_AUTO	310.17735 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_AUTO	284.22795 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_AUTO	0.91634	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 3/16/2007 12:00 PM EDT

Activity: 070316120001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	7.0971	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStream	163.83668 µeq/L	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_AutoStream	32.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_AutoStream	121.63512 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_AutoStream	102.60223 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_AutoStream	68.50471 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_AutoStream	5.17178 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_AutoStream	186.816 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_AutoStream	25.0221 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_AutoStream	70.13987 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_AutoStream	25.01946 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_AUTO	297.92034 µeq/L	Detected and Quantified	F	Actual				2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_AUTO	284.01811 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_AUTO	0.95334	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 3/16/2007 10:00 AM EDT

Activity: 070316100001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	7.0579	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStream	163.99739 µeq/L	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_AutoStream	32 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_AutoStream	122.48794 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_AutoStream	102.38579 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_AutoStream	69.62814 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_AutoStream	5.04858 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_AutoStream	188.759 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_AutoStream	22.48639 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_AutoStream	68.19981 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_AutoStream	25.9871 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_AUTO	299.55695 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_AUTO	280.67069 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_AUTO	0.93695	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 3/21/2007 11:30 AM EDT

Visit Comment: FAD
//
//cloudy, cool
rain and snow last Friday

Activity: 070321113001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.1155	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	168.99418 µeq/L	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	31.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										

Ca_Ions_Grab	121.29552 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	103.94937 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	70.85666 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	4.63859 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	194.801 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	15.00279 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	73.67872 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	26.17471 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	300.74664 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	283.8504 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94382	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07032111300F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	6 °C	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 3/28/2007 1:10 PM EDT
Visit Comment: FAD //
//clear, warm spring-like

Activity: 070328131001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7415	Detected and Quantified	F	Actual				4/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	191.17673 µeq/L	Detected and Quantified	F	Actual				4/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	32.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/3/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	125.37328 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	104.23975 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	76.9706 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	5.57953 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	209.127 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.96875 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	66.45123 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	27.91596 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	313.13191 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	285.58442 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.91203	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07032813100F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.5 °C	Detected and Quantified	F	Actual				3/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 4/4/2007 11:30 AM EDT
Visit Comment: FAD //
//clear, cool
rain last night

Activity: 070404113001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.2429	Detected and Quantified	F	Actual				4/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	213.96394 µeq/L	Detected and Quantified	F	Actual				4/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	33.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/5/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	131.17139 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	109.38123 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	80.3104 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	5.61387 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	216.879 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	62.30819 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	28.59154 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	326.48339 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	304.90417 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9339	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07040411300F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11 °C	Detected and Quantified	F	Actual				4/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 4/11/2007 11:40 AM EDT
Visit Comment: FAD //
//cloudy, cool
light rain

Activity: 070411114001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.828	Detected and Quantified	F	Actual				4/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	198.26664 µeq/L	Detected and Quantified	F	Actual				4/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	32.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/16/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	125.78054 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	105.94846 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	76.9231 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	5.07739 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	208.38 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	0.75983 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	59.76802 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	28.38479 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	313.73599 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	287.17928 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.91535	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07041111400F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7 °C	Detected and Quantified	F	Actual				4/11/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 4/15/2007 10:00 AM EDT

Activity: 070415100001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	6.7525	Detected and Quantified	F	Actual				4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStream	187.91768 µeq/L	Detected and Quantified	F	Actual				4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_AutoStream	33.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_AutoStream	128.43541 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_AutoStream	104.21687 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_AutoStream	76.36342 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_AutoStream	10.91669 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_AutoStream	237.21952 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_AutoStream	45.55355 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	1/16/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NO3_Ions_AutoStream	19.07905 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_AutoStream	67.02513 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_AutoStream	30.32966 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_AUTO	365.48594 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_AUTO	304.35152 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_AUTO	0.83273	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 4/15/2007 12:00 PM EDT

Activity: 070415120001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	7.0722	Detected and Quantified	F	Actual				4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStream	180.99734 µeq/L	Detected and Quantified	F	Actual				4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_AutoStream	32.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	4/20/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_AutoStream	128.94529 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_AutoStream	105.63522 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_AutoStream	70.01914 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_AutoStream	5.66623 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_AutoStream	194.38271 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_AutoStream	2.87121 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_AutoStream	10.83189 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_AutoStream	67.15887 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_AutoStream	24.08024 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_AUTO	313.13709 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_AUTO	283.06834 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_AUTO	0.90398	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 4/15/2007 2:00 PM EDT

Activity: 070415140001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	7.0939	Detected and Quantified	F	Actual				4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStrea m	181.72149 µeq/L	Detected and Quantified	F	Actual				4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Aut oStream	34.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_AutoStream	139.3207 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_AutoStream	110.13777 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_AutoStream	70.39155 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_AutoStream	5.93962 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_AutoStream	204.9647 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_AutoStream	3.88071 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_AutoStream	10.24212 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_AutoStream	74.19012 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_AutoStream	23.96368 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_AUTO	329.67035 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_AUTO	290.11741 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_AUTO	0.88002	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 4/15/2007 4:00 PM EDT

Activity: 070415160001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	7.1484	Detected and Quantified	F	Actual				4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStream	177.61005 µeq/L	Detected and Quantified	F	Actual				4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_AutoStream	34.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_AutoStream	136.03397 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_AutoStream	111.58383 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_AutoStream	69.82378 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_AutoStream	5.82339 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_AutoStream	187.72977 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_AutoStream	0.29772 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_AutoStream	17.03944 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_AutoStream	78.64639 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_AutoStream	23.43416 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_AUTO	323.56269 µeq/L	Detected and Quantified	F	Actual				3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_AUTO	296.73004 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_AUTO	0.91707	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 4/16/2007 4:00 AM EDT

Activity: 070416040001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	7.1907	Detected and Quantified	F	Actual				4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStream	179.32019 µeq/L	Detected and Quantified	F	Actual				4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_AutoStream	34.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_AutoStream	134.38385 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_AutoStream	112.22089 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_AutoStream	70.50075 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_AutoStream	5.45876 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_AutoStream	193.20811 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_AutoStream	0.33223 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_AutoStream	11.97994 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_AutoStream	85.2505 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_AutoStream	24.44203 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_AUTO	322.89648 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_AUTO	300.99266 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_AUTO	0.93216	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 4/16/2007 8:00 AM EDT

Activity: 070416080001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	7.1973	Detected and Quantified	F	Actual				4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStream	177.57743 µeq/L	Detected and Quantified	F	Actual				4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_AutoStream	34.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	4/20/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_AutoStream	133.84963 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_AutoStream	111.49761 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
Na_Ions_AutoStream	70.58943 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
K_Ions_AutoStream	5.21989 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SiO2_TC_AutoStream	193.99115 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
NH4_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
NO3_Ions_AutoStream	18.29096 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SO4_Ions_AutoStream	85.11909 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
Cl_Ions_AutoStream	24.75659 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SBC_IC2_AUTO	321.16306 µeq/L	Detected and Quantified	F	Actual			12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_AUTO	305.74407 µeq/L	Detected and Quantified	F	Actual			12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N					

IONRATIO_MET_IC2_AUTO	0.95199	Detected and Quantified	F	Actual				12/1/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 4/19/2007 11:10 AM EDT

Activity: 070418111001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	8.0 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	0 days	Detected and Quantified	F	Actual								

Activity: 070419111002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.50 ft	Detected and Quantified	F	Actual								
WatLev_Chart	2.52 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.52 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.60 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.71 volts	Detected and Quantified	F	Actual								

Activity: 070419111003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No
Activity Comment: Angler upstream

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.0274	Detected and Quantified	F	Actual				4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	182.36961 µeq/L	Detected and Quantified	F	Actual			4/20/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	32.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	4/20/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: estimated 1/8/08							
Ca_Ions_Grab	126.87778 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
Mg_Ions_Grab	106.05164 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
Na_Ions_Grab	73.033 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
K_Ions_Grab	5.17669 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SiO2_TC_Grab	198.69159 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
NH4_Ions_Grab	0.43329 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SO4_Ions_Grab	74.77004 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
Cl_Ions_Grab	26.7058 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/14/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							

SBC_IC2_GRAB	311.5724 µeq/L	Detected and Quantified	F	Actual		12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N				
SAA_MET_IC2_GRAB	283.88595 µeq/L	Detected and Quantified	F	Actual		12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N				
IONRATIO_MET_IC2_GRAB	0.91114	Detected and Quantified	F	Actual		12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N				

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 4/25/2007 12:30 PM EDT

Activity: 070425123001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	1 days	Detected and Quantified	F	Actual								

Activity: 070425123002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.32 ft	Detected and Quantified	F	Actual								
WatLev_Chart	2.34 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.35 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.63 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	14.07 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

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Activity: 070425123003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.2298	Detected and Quantified	F	Actual				4/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	212.50035 µeq/L	Detected and Quantified	F	Actual				4/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	33.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	133.65274 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	109.72152 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	80.2894 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	5.954 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	216.20451 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	65.26388 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	28.18403 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	329.62416 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	305.98876 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.9283	Detected and Quantified	F	Actual				4/23/2008					

Dilution: N *Recovery:* N *Correction:* N

Activity: 070425123004 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 5/3/2007 12:35 PM EDT

Activity: 070503123501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.5 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	0 days	Detected and Quantified	F	Actual								

Activity: 070503123502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.28 ft	Detected and Quantified	F	Actual								
WatLev_Chart	2.30 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.64 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.00 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

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Activity: 070503123503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8867	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	233.83375 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	36.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	144.02482 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	118.20568 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	83.89007 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.24807 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	222.2371 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	63.42724 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	27.78261 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	352.37514 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	325.0841 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.92255	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

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Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 5/9/2007 1:50 PM EDT

Activity: 070509135001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070509135002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.23 ft	Detected and Quantified	F	Actual								
WatLev_Chart	2.25 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.24 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.63 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.88 volts	Detected and Quantified	F	Actual								

Activity: 070509135003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.2503	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	239.46213 µeq/L	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	31.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	142.11774 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	115.9206 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	84.6725 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	6.33715 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	226.1518 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	59.72526 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	28.08745 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	349.05449 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	327.31534 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93772	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070509135004 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

NPSTORET Results with Comments

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Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 5/16/2007 12:20 PM EDT

Activity: 070516122001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070516122002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.16 ft	Detected and Quantified	F	Actual								
WatLev_Chart	2.17 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.16 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.63 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.15 volts	Detected and Quantified	F	Actual								

Activity: 070516122003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.2805	Detected and Quantified	F	Actual				5/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	257.67933 µeq/L	Detected and Quantified	F	Actual				5/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	33.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	149.21805 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	121.1785 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	88.58995 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	6.51456 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	236.72998 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	2.56065 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	56.83782 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	28.16003 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	365.50756 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	345.23783 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94454	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 5/23/2007 10:50 AM EDT

Activity: 070523105001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								

flow_streamStage	NORMAL	Detected and Quantified	F	Actual

Activity: 070523105002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.13 ft	Detected and Quantified	F	Actual								
WatLev_Chart	2.13 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.12 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.62 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.09 volts	Detected and Quantified	F	Actual								

Activity: 070523105003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.2347	Detected and Quantified	F	Actual				5/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	265.00379 µeq/L	Detected and Quantified	F	Actual				5/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	33.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	152.13391 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	123.72905 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	89.24911 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.10155 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	238.41745 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	0.28543 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	54.72926 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	27.585 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	371.49905 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	347.35855 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93502	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070523105004 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 5/30/2007 2:55 PM EDT

Activity: 070530145501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.2 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070530145502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.07 ft	Detected and Quantified	F	Actual								
WatLev_Chart	2.08 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.06 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.62 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.14 volts	Detected and Quantified	F	Actual								

Activity: 070530145503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.3046	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	284.81877 µeq/L	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	35.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	161.01451 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	129.19603 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	95.56851 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/3/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.85673 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	251.0204 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	53.50765 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	27.43441 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	392.64228 µeq/L	Detected and Quantified	F	Actual				3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	365.80133 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.93164	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 6/6/2007 2:25 PM EDT

Activity: 070606142501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	16.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070606142502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.07 ft	Detected and Quantified	F	Actual								
WatLev_Chart	2.08 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.08 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.62 volts	Detected and Quantified	F	Actual								

voltage_solarLoad	12.91 volts	Detected and Quantified	F	Actual

Activity: 070606142503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.2912	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	293.50671 µeq/L	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	35.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	164.06643 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	132.23096 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	97.00961 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/4/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.00746 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	257.25173 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.25129 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	52.085 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	26.90979 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	400.56575 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	372.542 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.93004	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 070606142504 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 070606142505 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
discharge velocity	3.183 ft/sec	Detected and Quantified	F	Calculated								

Activity: 070606142505 **Activity Type:** Quality Control Field Replicate Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
discharge velocity	3.5662 ft/sec	Detected and Quantified	F	Calculated								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 6/12/2007 2:00 PM EDT

Activity: 070612140001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.8 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070612140002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	1.96 ft	Detected and Quantified	F	Actual								
WatLev_Chart	1.95 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	1.95 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.62 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.81 volts	Detected and Quantified	F	Actual								

Activity: 070612140003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.3204	Detected and Quantified	F	Actual				6/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	303.04543 µeq/L	Detected and Quantified	F	Actual				6/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	36.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	166.6143 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	133.02513 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	101.12363 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/18/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.03727 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	265.28024 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	49.18427 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	27.69862 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	407.80683 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	379.96882 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.93174	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 6/19/2007 2:00 PM EDT

Activity: 070619140001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.0 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070619140002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.12 ft	Detected and Quantified	F	Actual								
WatLev_Chart	2.15 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.13 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.61 volts	Detected and Quantified	F	Actual								

voltage_solarLoad	12.19 volts	Detected and Quantified	F	Actual

Activity: 070619140003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.2354	Detected and Quantified	F	Actual				6/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	309.16441 µeq/L	Detected and Quantified	F	Actual				6/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	37.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	174.67709 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	140.06737 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	96.66577 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/18/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.22651 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	253.89306 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	1.40258 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	53.14993 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	25.01366 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	420.03932 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	387.3685 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.92222	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 6/25/2007 2:10 PM EDT

Activity: 070625141001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	19.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070625141002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No
Activity Comment: Solar batteries low, being charged & will be replaced next week.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	1.97 ft	Detected and Quantified	F	Actual								
WatLev_Chart	1.97 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	1.97 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.67 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.2 volts	Detected and Quantified	F	Actual								

Activity: 070625141003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.3121	Detected and Quantified	F	Actual				6/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	317.9795 µeq/L	Detected and Quantified	F	Actual			6/27/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	37 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	6/27/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	172.72307 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	137.92258 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	101.39172 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/18/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
K_Ions_Grab	7.1078 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	264.10145 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	2.17221 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	2.75158 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	50.58313 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	25.9771 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	421.31738 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	397.29131 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94297	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 6/29/2007 12:00 AM EDT

Activity: 070629000001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	6.7051	Detected and Quantified	F	Actual				7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStream	261.73378 µeq/L	Detected and Quantified	F	Actual				7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_AutoStream	33 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_AutoStream	156.25728 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_AutoStream	121.42677 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_AutoStream	85.42127 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_AutoStream	9.18159 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_AutoStream	349.0559 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_AutoStream	2.54537 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_AutoStream	58.82385 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_AutoStream	23.76064 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_AUTO	372.29341 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_AUTO	346.86364 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_AUTO	0.93169	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 7/3/2007 2:50 PM EDT

Activity: 070703145001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	19.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070703145002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No
Activity Comment: Solar batteries changed

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	1.97 ft	Detected and Quantified	F	Actual								
WatLev_Chart	1.97 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	1.96 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.60 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.03 volts	Detected and Quantified	F	Actual								

Activity: 070703145003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.0741	Detected and Quantified	F	Actual				7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	322.31231 µeq/L	Detected and Quantified	F	Actual			7/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	35.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	7/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	171.11632 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	137.06974 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	98.17909 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/18/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
K_Ions_Grab	6.80688 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	259.38814 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.54771 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	53.62786 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	23.76612 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	413.71974 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	399.74679 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96623	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 7/10/2007 2:25 PM EDT

Activity: 070710142501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070710142502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	1.83 ft	Detected and Quantified	F	Actual								
WatLev_Chart	1.79 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	1.79 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.94 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.21 volts	Detected and Quantified	F	Actual								

Activity: 070710142503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.3497	Detected and Quantified	F	Actual				7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	345.66138 µeq/L	Detected and Quantified	F	Actual				7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	38.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	183.68813 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	144.70148 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	105.80669 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/24/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
K_Ions_Grab	7.60071 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	275.11083 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.2316 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	48.39952 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	26.08646 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	442.02861 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	420.18786 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95059	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 7/17/2007 2:28 PM EDT

Activity: 070717142801 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								

flow_streamStage	NORMAL	Detected and Quantified	F	Actual

Activity: 070717142802 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.00 ft	Detected and Quantified	F	Actual								
WatLev_Chart	2.05 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.00 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.91 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.72 volts	Detected and Quantified	F	Actual								

Activity: 070717142803 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.166	Detected and Quantified	F	Actual				7/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	339.90498 µeq/L	Detected and Quantified	F	Actual				7/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	39.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	185.08714 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	146.02688 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	101.43544 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/24/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.43836 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	260.56618 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	1.48777 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	3.01856 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	50.30683 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	24.07973 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	441.47559 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	417.3101 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94526	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070717142804 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
discharge velocity	2.2665 ft/sec	Detected and Quantified	F	Calculated								

Activity: 070717142804 **Activity Type:** Quality Control Field Replicate Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
discharge velocity	1.729 ft/sec	Detected and Quantified	F	Calculated								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 7/25/2007 4:41 PM EDT

Activity: 070725164101 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	21.0 °C	Detected and Quantified	F	Actual								

weather	2	Detected and Quantified	F	Actual
water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	NORMAL	Detected and Quantified	F	Actual

Activity: 070725164102 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	1.88 ft	Detected and Quantified	F	Actual								
WatLev_Chart	1.87 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	1.86 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.89 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.51 volts	Detected and Quantified	F	Actual								

Activity: 070725164103 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.3513	Detected and Quantified	F	Actual				7/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	350.22275 µeq/L	Detected and Quantified	F	Actual				7/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	39.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	188.17096 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	147.85608 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	108.52037 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/24/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	8.47769 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	276.88089 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008
Dilution: Y	*Recovery:* N	*Correction:* N						
NH4_Ions_Grab	2.65361 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	48.42934 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	26.71541 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	455.67871 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	425.408 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.93357	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 070725164104 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 8/1/2007 2:45 PM EDT

Activity: 070801144501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	22.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								

water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	NORMAL	Detected and Quantified	F	Actual

Activity: 070801144502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	1.76 ft	Detected and Quantified	F	Actual								
WatLev_Chart	1.73 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	1.73 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.87 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.67 volts	Detected and Quantified	F	Actual								

Activity: 070801144503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.3504	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	362.60124 µeq/L	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	40 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	195.65172 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	151.45832 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	109.15076 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.49854 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	274.90102 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	0.61224 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	4.2116 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	45.98976 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	25.43763 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	464.37158 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	438.24023 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94373	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 8/7/2007 1:20 PM EDT

Activity: 070807132001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	21.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070807132002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	1.74 ft	Detected and Quantified	F	Actual								
WatLev_Chart	1.71 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	1.70 ft	Detected and Quantified	F	Actual								

voltage_StevensClock	8.86 volts	Detected and Quantified	F	Actual
voltage_solarLoad	12.84 volts	Detected and Quantified	F	Actual

Activity: 070807132003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.2856	Detected and Quantified	F	Actual				8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	378.16625 µeq/L	Detected and Quantified	F	Actual				8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	42.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	201.86673 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	153.39623 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	114.47668 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	8.65253 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	286.56394 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	3.56973 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	44.38517 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	26.71694 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	481.9619 µeq/L	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				
SAA_MET_IC2_GRAB	449.30886 µeq/L	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				
IONRATIO_MET_IC2_GRAB	0.93225	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 8/14/2007 1:30 PM EDT

Activity: 070814133001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070814133002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	1.68 ft	Detected and Quantified	F	Actual								
WatLev_Chart	1.65 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	1.65 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.85 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.7 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070814133003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9541	Detected and Quantified	F	Actual				8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	397.69676 µeq/L	Detected and Quantified	F	Actual				8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	41.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	206.49529 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	157.56649 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	116.23859 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	8.16802 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	288.50936 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.22936 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	6.73768 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	43.15119 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	25.8567 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	488.69775 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	473.44233 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.96878	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 8/21/2007 3:25 PM EDT

Activity: 070821152501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070821152502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.05 ft	Detected and Quantified	F	Actual								
WatLev_Chart	2.07 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.06 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.82 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.51 volts	Detected and Quantified	F	Actual								

Activity: 070821152503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.2873	Detected and Quantified	F	Actual				8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	369.26997 µeq/L	Detected and Quantified	F	Actual				8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	42.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	8/23/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	210.36378 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	162.66323 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	109.22553 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/25/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
K_Ions_Grab	8.94136 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	274.8076 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	18.53585 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	55.18566 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	25.01807 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	491.2004 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	468.00955 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95279	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 8/27/2007 2:19 PM EDT

Activity: 070827141901 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	19.3 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070827141902 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	1.90 ft	Detected and Quantified	F	Actual								
WatLev_Chart	1.90 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	1.91 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.81 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.44 volts	Detected and Quantified	F	Actual								

Activity: 070827141903 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.1616	Detected and Quantified	F	Actual				8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	383.79177 µeq/L	Detected and Quantified	F	Actual				8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	41 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	204.33119 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	158.60795 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	109.55586 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/25/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
K_Ions_Grab	8.04693 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	281.40224 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.99916 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	3.02757 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	52.39347 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	24.29816 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	481.54109 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	463.51097 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96256	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 9/9/2007 1:49 PM EDT

Activity: 070909134901 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	19.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								

flow_streamStage	NORMAL	Detected and Quantified	F	Actual

Activity: 070909134902 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	1.65 ft	Detected and Quantified	F	Actual								
WatLev_Chart	1.65 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	1.62 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.78 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.45 volts	Detected and Quantified	F	Actual								

Activity: 070909134903 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.2055	Detected and Quantified	F	Actual				9/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	405.25974 µeq/L	Detected and Quantified	F	Actual				9/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	43.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		9/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	211.68731 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	160.98425 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	121.51026 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	9.26592 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	300.44274 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NO3_Ions_Grab	6.06696 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	41.97999 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	27.31347 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	503.45424 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	480.62016 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.95465	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 9/11/2007 2:50 PM EDT

Activity: 070911145001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Suzanne Maben **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	20.8 °C	Detected and Quantified	F	Actual								
weather	8	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 070911145002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Suzanne Maben **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	1.74 ft	Detected and Quantified	F	Actual								
WatLev_Chart	1.70 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	1.68 ft	Detected and Quantified	F	Actual								

voltage_StevensClock	8.78 volts	Detected and Quantified	F	Actual
voltage_solarLoad	12.59 volts	Detected and Quantified	F	Actual

Activity: 070911145003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Suzanne Maben **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9657	Detected and Quantified	F	Actual				9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	411.08269 µeq/L	Detected and Quantified	F	Actual				9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	42.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	214.19178 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	163.76295 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	117.50427 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.17785 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	295.77531 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.26296 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	2.88078 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	41.38706 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	26.41773 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	505.89981 µeq/L	Detected and Quantified	F	Actual	4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N			
SAA_MET_IC2_GRAB	481.76826 µeq/L	Detected and Quantified	F	Actual	4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N			
IONRATIO_MET_IC2_GRAB	0.9523	Detected and Quantified	F	Actual	4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N			

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 9/20/2007 1:20 PM EDT

Activity: 070920132001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Suzanne Maben\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.7 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 070920132002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Suzanne Maben\Zachary Lucy **QC Sample?:** No

Activity Comment: Changed AXSYS height to 1.72

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	1.72 ft	Detected and Quantified	F	Actual								
WatLev_Chart	1.69 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	1.67 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.74 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.53 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070920132003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Suzanne Maben\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8686	Detected and Quantified	F	Actual				9/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	387.57781 µeq/L	Detected and Quantified	F	Actual				9/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	40.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		9/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	197.56962 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	153.35624 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	116.47434 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/9/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.88126 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	290.33363 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	1.58609 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	3.81309 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	44.25307 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	26.0176 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	476.86755 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	461.66157 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.96811	Detected and Quantified	F	Actual		4/23/2008

Dilution: N *Recovery:* N *Correction:* N

Activity: 070920132004 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Suzanne Maben\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 9/25/2007 2:25 PM EDT

Activity: 070925142501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr.\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.25 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 070925142502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr.\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	1.67 ft	Detected and Quantified	F	Actual								
WatLev_Chart	1.64 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	1.67 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.73 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.55 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070925142503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr.\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.0963	Detected and Quantified	F	Actual				9/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	402.82806 µeq/L	Detected and Quantified	F	Actual				9/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	42.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		9/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	203.86013 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	157.41829 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	119.87127 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/9/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	8.42972 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	294.03259 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	3.30814 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	42.44395 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	25.7851 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	489.58591 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	474.36525 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.96891	Detected and Quantified	F	Actual				4/23/2008				

Dilution: N *Recovery:* N *Correction:* N

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 10/2/2007 2:41 PM EDT

Activity: 071002144101 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071002144102 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	1.70 ft	Detected and Quantified	F	Actual								
WatLev_Chart	1.72 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	1.74 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.72 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.56 volts	Detected and Quantified	F	Actual								

Activity: 071002144103 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9293	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	406.89434 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	41.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/7/2007				

Dilution: N *Recovery:* N *Correction:* N

Ca_Ions_Grab	202.23153 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	159.14408 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	121.43939 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/9/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
K_Ions_Grab	9.31579 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	294.03259 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	2.42379 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	1.27311 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	40.85535 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	27.76838 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	494.55458 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	476.79118 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96408	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071002144104 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

NPSTORET Results with Comments

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Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 10/9/2007 12:40 PM EDT

Activity: 071009124001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	19.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071009124002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	1.69 ft	Detected and Quantified	F	Actual								
WatLev_Chart	1.74 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	1.75 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.71 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.83 volts	Detected and Quantified	F	Actual								

Activity: 071009124003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.1882	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	438.37754 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	44.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/11/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	215.25684 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	168.32299 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	125.32297 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/10/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
K_Ions_Grab	10.49526 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	306.46611 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	38.04903 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	26.93805 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	519.40456 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	503.40512 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9692	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** PINE **Visit Date:** 10/15/2007 12:30 PM EDT

Activity: 071015123001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071015123002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Had to reset AXSYS height

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	1.73 ft	Detected and Quantified	F	Actual								
WatLev_Chart	1.75 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	1.75 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.69 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.76 volts	Detected and Quantified	F	Actual								

Activity: 071015123003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.169	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	411.84836 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	42.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	204.58125 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	163.04927 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	120.07263 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/10/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	9.17422 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	290.42318 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	38.68908 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	27.45332 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	496.88387 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	478.03126 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.96206	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 071015123004 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 10/22/2007 1:10 PM EDT

Activity: 071022131001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

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Activity: 071022131002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	1.78 ft	Detected and Quantified	F	Actual								
WatLev_Chart	1.80 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	1.80 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.67 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.47 volts	Detected and Quantified	F	Actual								

Activity: 071022131003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.2871	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	423.4165 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	44.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/25/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	209.07682 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	166.21456 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/11/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	122.56912 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/11/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.88162 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	293.32924 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	1.30748 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	39.59942 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	30.80547 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	508.74862 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	495.12887 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97323	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 10/30/2007 12:40 PM EDT
Visit Comment: 3 days of rain since last visit; took flow measurement.

Activity: 071030124001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071030124002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.00 ft	Detected and Quantified	F	Actual								
WatLev_Chart	2.03 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.04 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.66 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.75 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

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Activity: 071030124003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.1126	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	314.70104 µeq/L	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	39.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	185.36655 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	151.02244 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	101.91082 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	8.18365 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	261.38073 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	71.84723 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	41.69047 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	446.48996 µeq/L	Detected and Quantified	F	Actual				12/1/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	428.27924 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.95921	Detected and Quantified	F	Actual				12/1/2008					

Dilution: N *Recovery:* N *Correction:* N

Activity: 071030124004 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071030124005 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
discharge velocity	3.6768 ft/sec	Detected and Quantified	F	Calculated								

Activity: 071030124005 **Activity Type:** Quality Control Field Replicate Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
discharge velocity	3.0084 ft/sec	Detected and Quantified	F	Calculated								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 11/5/2007 1:25 PM EST

Activity: 071105132501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071105132502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	1.89 ft	Detected and Quantified	F	Actual								
WatLev_Chart	1.92 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	1.92 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.64 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.40 volts	Detected and Quantified	F	Actual								

Activity: 071105132503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.2541	Detected and Quantified	F	Actual				11/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	336.99961 µeq/L	Detected and Quantified	F	Actual				11/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	39.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	182.8962 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	147.39426 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	104.16622 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	8.16699 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	263.71428 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	63.24054 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	39.08346 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	442.63017 µeq/L	Detected and Quantified	F	Actual			12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	439.36411 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.99262	Detected and Quantified	F	Actual			12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 11/12/2007 2:10 PM EST

Activity: 071112141001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	8.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071112141002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	1.93 ft	Detected and Quantified	F	Actual								
WatLev_Chart	1.95 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	1.96 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.61 volts	Detected and Quantified	F	Actual								

voltage_solarLoad	12.46 volts	Detected and Quantified	F	Actual

Activity: 071112141003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.2206	Detected and Quantified	F	Actual				11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	330.55097 µeq/L	Detected and Quantified	F	Actual				11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	38.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	178.48903 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	143.96733 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	102.61032 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	8.09795 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	260.99805 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	61.19239 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	38.13214 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	433.17113 µeq/L	Detected and Quantified	F	Actual				12/1/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	429.916 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.99249	Detected and Quantified	F	Actual				12/1/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 071112141004 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 11/20/2007 1:10 PM EST

Activity: 071120131001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071120131002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Reset AXSYS height

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.02 ft	Detected and Quantified	F	Actual								
WatLev_Chart	2.04 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.04 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.59 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.80 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071120131003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.2598	Detected and Quantified	F	Actual				11/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	302.78758 µeq/L	Detected and Quantified	F	Actual				11/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	37.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	169.89807 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	137.026 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	95.42371 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.31092 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	248.97745 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	0.94984 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	65.01896 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	38.70021 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	409.6652 µeq/L	Detected and Quantified	F	Actual				12/1/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	407.45659 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.99461	Detected and Quantified	F	Actual				12/1/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 11/27/2007 1:15 PM EST

Activity: 071127131501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	8.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071127131502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Adjusted ISCO flow actuator to winter height

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	*Not Reported	*Not Reported	F	Actual								
WatLev_Chart	2.04 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.04 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.58 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.50 volts	Detected and Quantified	F	Actual								

Activity: 071127131503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.2511	Detected and Quantified	F	Actual				11/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	314.79598 µeq/L	Detected and Quantified	F	Actual				11/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	37.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	11/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	172.39327 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	138.96156 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	98.55724 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/25/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
K_Ions_Grab	8.34475 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	254.79216 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	60.9157 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	38.50364 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	418.26332 µeq/L	Detected and Quantified	F	Actual			12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	414.25582 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.99042	Detected and Quantified	F	Actual			12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071127131504 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 12/3/2007 2:30 PM EST

Activity: 071203143001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	5.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071203143002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.05 ft	Detected and Quantified	F	Actual								
WatLev_Chart	2.06 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.08 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.56 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.57 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071203143003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: ISCO tubing is stuck in top part of pipe; end of tubing had been chewed up; when I tried to replace it, only came up with 5 feet.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.3363	Detected and Quantified	F	Actual				12/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	295.75582 µeq/L	Detected and Quantified	F	Actual				12/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	34.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		12/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	161.56552 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	132.36539 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	96.01821 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.4732 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	248.58992 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	59.41256 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	37.89757 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	397.42882 µeq/L	Detected and Quantified	F	Actual				12/1/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	393.10645 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.98912	Detected and Quantified	F	Actual				12/1/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 12/10/2007 1:35 PM EST

Activity: 071210133501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9.5 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 071210133502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.30 ft	Detected and Quantified	F	Actual								
WatLev_Chart	2.31 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.31 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	*Not Reported	*Not Reported	F	Actual								
voltage_solarLoad	12.30 volts	Detected and Quantified	F	Actual								

Activity: 071210133503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.2829	Detected and Quantified	F	Actual				12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	246.52624 µeq/L	Detected and Quantified	F	Actual			12/19/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	33.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	12/19/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	149.71532 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	122.48722 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	82.33675 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	6.90291 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	217.48465 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	69.08627 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	38.54804 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	361.4487 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	354.20105 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97995	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071210133504 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 12/18/2007 1:00 PM EST
Visit Comment: Replaced ISCO inlet tubing

Activity: 071218130001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	6.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071218130002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	*Not Reported	*Not Reported	F	Actual								
WatLev_Chart	2.25 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.26 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.52 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.80 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071218130003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.2311	Detected and Quantified	F	Actual				12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	194.89899 µeq/L	Detected and Quantified	F	Actual				12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	31.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	133.94491 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
Mg_Ions_Grab	112.79824 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
Na_Ions_Grab	74.24575 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
K_Ions_Grab	4.9967 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
SiO2_TC_Grab	201.65154 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	84.85455 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												

Cl_Ions_Grab	38.1191 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SBC_IC2_GRAB	325.9921 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	317.91314 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97522	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** PINE **Visit Date:** 12/27/2007 12:20 PM EST

Activity: 071227122001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071227122002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	*Not Reported	*Not Reported	F	Actual								
WatLev_Chart	2.20 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.21 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.51 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.5 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071227122003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9901	Detected and Quantified	F	Actual				1/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	180.80493 µeq/L	Detected and Quantified	F	Actual				1/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	29.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: estimated 1/8/08												
Ca_Ions_Grab	125.61323 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
Mg_Ions_Grab	105.17053 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
Na_Ions_Grab	72.0173 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
K_Ions_Grab	4.26197 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
SiO2_TC_Grab	193.1651 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												

SO4_Ions_Grab	79.90663 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
Cl_Ions_Grab	37.49489 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SBC_IC2_GRAB	307.06953 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	298.24695 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97127	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071227122004 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071227122005 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
discharge velocity	6.086 ft/sec	Detected and Quantified	F	Calculated								

Activity: 071227122005 **Activity Type:** Quality Control Field Replicate Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
discharge velocity	4.962 ft/sec	Detected and Quantified	F	Calculated								

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 1/2/2007 12:55 PM EST
Visit Comment: FAD //
//clear, cool
some rain

Activity: 070102125501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6052	Detected and Quantified	F	Actual				1/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	72.09425 µeq/L	Detected and Quantified	F	Actual				1/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/4/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	64.21746 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	27.15605 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	63.0966 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	9.1851 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	140.652 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	52.16267 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.83563 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	163.66171 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	146.13305 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.8929	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07010212550F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	8 °C	Detected and Quantified	F	Actual				1/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 1/9/2007 1:50 PM EST
Visit Comment: FAD //
//clear, cold
mild, rain

Activity: 070109135001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.529	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	81.22309 µeq/L	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/11/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	65.43949 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	27.44304 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	63.43036 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	9.122 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	141.166 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	53.34555 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.69184 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	165.44139 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	156.30098 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94475	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07010913500F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7.5 °C	Detected and Quantified	F	Actual				1/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 1/16/2007 2:00 PM EST
Visit Comment: FAD //
//cloudy, cold
mild, fairly dry

Activity: 070116140001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7844	Detected and Quantified	F	Actual				1/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	75.78017 µeq/L	Detected and Quantified	F	Actual				1/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/18/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	65.05973 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	27.31701 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	64.50367 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	9.22019 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	143.075 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	49.65589 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	22.08147 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	166.1071 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	147.55803 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.88833	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07011614000F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9 °C	Detected and Quantified	F	Actual				1/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 1/23/2007 1:20 PM EST
Visit Comment: FAD //stevens card working again! downloaded to card and to handheld, then R&Red internal battery on AXYSY MPU.
//cloudy, cold
light snow

Activity: 070123132001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.636	Detected and Quantified	F	Actual				1/25/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	69.98597 µeq/L	Detected and Quantified	F	Actual				1/25/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/25/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	62.21417 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	26.17384 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	62.18778 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	8.28037 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	140.519 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	47.59859 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.83241 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	158.86266 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	139.45747 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.87785	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07012313200F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	5 °C	Detected and Quantified	F	Actual				1/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 1/30/2007 2:05 PM EST
Visit Comment: FAD //
//cloudy, cold.
cold, dry.

Activity: 070130140501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7575	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	68.40225 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	60.59055 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	25.21123 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	62.0737 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	8.05615 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	141.698 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.60441 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	47.89356 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	22.30863 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	156.53604 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	138.64494 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.88571	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07013014050F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	3 °C	Detected and Quantified	F	Actual				1/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 2/6/2007 1:45 PM EST
Visit Comment: FAD //stilling well iced in.
//brutally cold.
Dry, getting colder.

Activity: 070206134501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.3064	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	79.31611 µeq/L	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/8/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	60.16079 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	25.96476 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	62.28171 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	8.02958 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	143.175 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.54419 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	48.34238 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	23.25896 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	156.98103 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	150.95795 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96163	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07020613450F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	0.5 °C	Detected and Quantified	F	Actual				2/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 2/14/2007 1:45 PM EST
Visit Comment: FAD //
//cold today
wintry mix last night

Activity: 070214134501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6848	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	60.84889 µeq/L	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	60.05755 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	25.64584 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	57.36992 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	8.3239 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	121.744 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	2.045 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	5.71444 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	47.17966 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	20.50613 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	153.44221 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	134.24912 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.87492	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07021413450F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	3.5 °C	Detected and Quantified	F	Actual				2/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 2/20/2007 1:10 PM EST
Visit Comment: FAD //
//cool, cloudy
cold, some snow

Activity: 070220131001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2165	Detected and Quantified	F	Actual				3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	75.88559 µeq/L	Detected and Quantified	F	Actual				3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	60.77856 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	25.84448 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	63.11831 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	8.11211 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	141.233 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	2.76188 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	50.50313 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.33766 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	160.61534 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	148.76688 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.92623	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07022013100F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	3.5 °C	Detected and Quantified	F	Actual				2/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 2/27/2007 1:05 PM EST
Visit Comment: FAD //
//clear, cool
some frozen precip

Activity: 070227130501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7341	Detected and Quantified	F	Actual				3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	67.47651 µeq/L	Detected and Quantified	F	Actual				3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	61.71343 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	26.25094 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	64.32724 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	8.66017 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	138.61 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	2.33596 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	1.00203 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	54.17608 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	22.02463 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	163.28774 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	144.67925 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.88604	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07022713050F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	6 °C	Detected and Quantified	F	Actual				2/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 3/2/2007 4:00 AM EST

Activity: 070302040001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_AutoStream	6.39	Detected and Quantified	F	Actual				3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_AutoStream	59.26532 µeq/L	Detected and Quantified	F	Actual				3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_AutoStream	19.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_AutoStream	65.77611 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_AutoStream	28.10118 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_AutoStream	58.6122 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_AutoStream	12.28484 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_AutoStream	112.897 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_AutoStream	9.70455 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_AutoStream	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_AutoStream	54.13104 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_AutoStream	22.43939 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_AUTO	174.47888 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_AUTO	135.87625 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_AUTO	0.77875	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** STAN **Visit Date:** 3/6/2007 1:20 PM EST

Visit Comment: FAD //
//clear, cold
significant rain

Activity: 070306132001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6995	Detected and Quantified	F	Actual				3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	62.58161 µeq/L	Detected and Quantified	F	Actual				3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	18.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	3/8/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_Grab	61.12223 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	26.81317 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	62.28739 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	8.70468 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	138.178 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	1.44586 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	58.03397 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.8677 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	160.37333 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	142.52378 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.8887	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07030613200F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	5 °C	Detected and Quantified	F	Actual				3/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 3/13/2007 2:20 PM EDT
Visit Comment: FAD //
//WARM, CLOUDY
dry

Activity: 070313142001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8231	Detected and Quantified	F	Actual				3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	70.82836 µeq/L	Detected and Quantified	F	Actual				3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	58.2718 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	24.82364 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	63.66945 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	8.66265 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	138.66 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	51.18195 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cl_Ions_Grab	21.9804 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	155.43404 µeq/L	Detected and Quantified	F	Actual				2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	144.03121 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.92664	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 07031314200F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10.5 °C	Detected and Quantified	F	Actual				3/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 3/20/2007 2:25 PM EDT
Visit Comment: FAD //
//clear, mild
rain and snow at higher elevations

Activity: 070320142501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6871	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	65.15487 µeq/L	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	59.29565 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	25.1126 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	62.46904 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	8.99211 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	135.157 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.25001 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	54.28784 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.27992 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	156.11941 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	140.76313 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.90164	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07032014250F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10.5 °C	Detected and Quantified	F	Actual				3/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 3/27/2007 1:20 PM EDT
Visit Comment: FAD //
//couldy, warm spring-like

Activity: 070327132001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.3363	Detected and Quantified	F	Actual				4/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	79.23398 µeq/L	Detected and Quantified	F	Actual				4/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/3/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	58.79469 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	24.84177 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	63.68078 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	9.25127 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	137.514 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	50.21076 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.72755 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	156.57501 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	151.21279 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.96575	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07032713200F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12 °C	Detected and Quantified	F	Actual				3/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 4/3/2007 2:10 PM EDT
Visit Comment: FAD //
//warm, sunny mostly dry

Activity: 070403141001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7874	Detected and Quantified	F	Actual				4/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	74.15957 µeq/L	Detected and Quantified	F	Actual				4/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/5/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	58.79857 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	24.51982 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	64.21108 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	9.52204 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	138.527 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	48.11552 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.54089 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	157.05801 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	143.85648 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.91594	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07040314100F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15 °C	Detected and Quantified	F	Actual				4/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 4/10/2007 2:35 PM EDT
Visit Comment: FAD //
//clear, cool
some rain

Activity: 070410143501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.1605	Detected and Quantified	F	Actual				4/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	69.00402 µeq/L	Detected and Quantified	F	Actual				4/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/16/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	57.44158 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	24.14089 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	62.24177 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	8.48486 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	135.24 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	47.3117 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.57316 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	152.3156 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	137.92938 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.90555	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07041014350F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9 °C	Detected and Quantified	F	Actual				4/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 4/18/2007 1:45 PM EDT
Visit Comment: ISCO failed. Low conductivity?

Activity: 070418134501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9.5 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	ABOVE NORMAL	Detected and Quantified	F	Actual								
days_since_precip	4 days	Detected and Quantified	F	Actual								

Activity: 070418134502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	3.42 ft	Detected and Quantified	F	Actual								
WatLev_Chart	3.42 ft	Detected and Quantified	F	Actual								

WatLev_AXSYS	3.42 ft	Detected and Quantified	F	Actual
voltage_StevensClock	8.96 volts	Detected and Quantified	F	Actual
voltage_solarLoad	13.89 volts	Detected and Quantified	F	Actual

Activity: 070418134503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6653	Detected and Quantified	F	Actual				4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	64.78429 µeq/L	Detected and Quantified	F	Actual				4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	60.36966 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	26.38867 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	63.1855 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	9.27661 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	136.01509 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	58.48493 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.21649 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	159.22694 µeq/L	Detected and Quantified	F	Actual		3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N				
SAA_MET_IC2_GRAB	144.52621 µeq/L	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				
IONRATIO_MET_IC2_GRAB	0.90767	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** STAN **Visit Date:** 4/24/2007 3:10 PM EDT

Activity: 070424151001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	8 days	Detected and Quantified	F	Actual								

Activity: 070424151002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	3.33 ft	Detected and Quantified	F	Actual								
WatLev_Chart	3.33 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	3.32 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.98 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.88 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

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Activity: 070424151003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6978	Detected and Quantified	F	Actual				4/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	77.30562 µeq/L	Detected and Quantified	F	Actual				4/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	60.92356 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	25.42075 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	64.78236 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	9.64979 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	137.98926 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	50.90383 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.37636 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	160.78296 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	149.62631 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.93061	Detected and Quantified	F	Actual				4/23/2008					

Dilution: N *Recovery:* N *Correction:* N

Activity: 070424151004 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 5/2/2007 2:30 PM EDT

Activity: 070502143001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	16.0 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	1 days	Detected and Quantified	F	Actual								

Activity: 070502143002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	3.19 ft	Detected and Quantified	F	Actual								
WatLev_Chart	3.22 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	3.22 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.99 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.70 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070502143003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8568	Detected and Quantified	F	Actual				5/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	82.36247 µeq/L	Detected and Quantified	F	Actual				5/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	61.93173 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	25.68085 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	66.9175 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.24916 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	142.03826 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	47.88871 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.51695 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	164.78574 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	151.80863 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.92125	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 5/8/2007 2:45 PM EDT

Activity: 070508144501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070508144502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	3.14 ft	Detected and Quantified	F	Actual								
WatLev_Chart	3.15 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	3.15 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.97 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.62 volts	Detected and Quantified	F	Actual								

Activity: 070508144503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8637	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	79.37073 µeq/L	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	16.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	5/10/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	62.19183 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	25.57941 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	66.05476 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	9.56596 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	142.73516 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	48.01946 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.71638 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	163.39846 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	149.14707 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.91278	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070508144504 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 5/15/2007 2:15 PM EDT

Activity: 070515141501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070515141502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	3.10 ft	Detected and Quantified	F	Actual								
WatLev_Chart	3.10 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	3.10 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.98 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.67 volts	Detected and Quantified	F	Actual								

Activity: 070515141503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9259	Detected and Quantified	F	Actual				5/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	82.13357 µeq/L	Detected and Quantified	F	Actual			5/17/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	16.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	5/17/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	63.39255 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	26.09136 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	67.58915 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	10.23675 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	144.90334 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	46.65383 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.47118 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	167.31631 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	150.29908 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.89829	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 5/22/2007 2:10 PM EDT

Activity: 070522141001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070522141002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No
Activity Comment: multi-meter mal-functioned

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	3.06 ft	Detected and Quantified	F	Actual								
WatLev_Chart	3.05 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	3.04 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	*Not Reported	*Not Reported	F	Actual								
voltage_solarLoad	*Not Reported	*Not Reported	F	Actual								

Activity: 070522141003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9449	Detected and Quantified	F	Actual				5/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	83.61878 µeq/L	Detected and Quantified	F	Actual				5/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	63.14952 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	26.04944 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	67.55296 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	9.71641 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	144.11479 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	45.99481 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.1976 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	166.47483 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	150.85169 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.90615	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070522141004 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

NPSTORET Results with Comments

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Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 5/30/2007 10:30 AM EDT

Activity: 070530103001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070530103002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	3.03 ft	Detected and Quantified	F	Actual								
WatLev_Chart	3.00 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.99 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.96 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.75 volts	Detected and Quantified	F	Actual								

Activity: 070530103003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.0094	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	87.11101 µeq/L	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	67.1177 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	27.54861 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	69.89054 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	10.79726 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	146.08268 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	44.71656 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.58064 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	175.36061 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	153.44871 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.87505	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** STAN **Visit Date:** 6/6/2007 10:40 AM EDT

Activity: 070606104001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								

flow_streamStage	NORMAL	Detected and Quantified	F	Actual

Activity: 070606104002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No
Activity Comment: Solar controller blinking - had to unplug and plug in battery

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	3.03 ft	Detected and Quantified	F	Actual								
WatLev_Chart	3.03 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	3.03 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.96 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.38 volts	Detected and Quantified	F	Actual								

Activity: 070606104003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9733	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	89.87212 µeq/L	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	69.35319 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	28.43748 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	68.56681 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.66559 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	147.43776 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	44.14617 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	20.22966 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/18/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	177.02957 µeq/L	Detected and Quantified	F	Actual				3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	154.28845 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.87154	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 070606104004 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 6/12/2007 10:40 AM EDT

Activity: 070612104001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070612104002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No
Activity Comment: Solar controller lights blinking - unplugged/plugged in - batt. OK now

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.97 ft	Detected and Quantified	F	Actual								
WatLev_Chart	2.97 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.97 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.96 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.36 volts	Detected and Quantified	F	Actual								

Activity: 070612104003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.0319	Detected and Quantified	F	Actual				6/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	88.30582 µeq/L	Detected and Quantified	F	Actual				6/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	66.13051 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	27.33124 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	68.35728 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.79882 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	147.24147 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	41.52168 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	20.60936 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	172.62435 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	150.47736 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.8717	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** STAN **Visit Date:** 6/19/2007 10:04 AM EDT

Activity: 070619100401 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070619100402 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.95 ft	Detected and Quantified	F	Actual								
WatLev_Chart	2.95 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.97 ft	Detected and Quantified	F	Actual								

voltage_StevensClock	8.95 volts	Detected and Quantified	F	Actual
voltage_solarLoad	13.74 volts	Detected and Quantified	F	Actual

Activity: 070619100403 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9613	Detected and Quantified	F	Actual				6/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	93.15304 µeq/L	Detected and Quantified	F	Actual				6/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	67.61182 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	27.99183 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	69.30469 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.75416 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	144.84197 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	41.46926 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	20.38197 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	175.669 µeq/L	Detected and Quantified	F	Actual		3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N				
SAA_MET_IC2_GRAB	155.04477 µeq/L	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				
IONRATIO_MET_IC2_GRAB	0.8826	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** STAN **Visit Date:** 6/25/2007 11:00 AM EDT

Activity: 070625110001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	19.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070625110002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.94 ft	Detected and Quantified	F	Actual								
WatLev_Chart	2.94 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.94 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.94 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.81 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070625110003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.1185	Detected and Quantified	F	Actual				6/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	130.75888 µeq/L	Detected and Quantified	F	Actual				6/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	83.12101 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	44.95696 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	65.25982 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	8.64893 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	136.37515 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	34.84198 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	20.46097 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	201.99322 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	186.10233 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.92133	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 7/3/2007 11:30 AM EDT

Activity: 070703113001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	20.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070703113002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No
Activity Comment: Solar controller blinking - unplugged and plugged back in

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.90 ft	Detected and Quantified	F	Actual								
WatLev_Chart	2.92 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.90 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.94 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.45 volts	Detected and Quantified	F	Actual								

Activity: 070703113003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5475	Detected and Quantified	F	Actual				7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	111.84042 µeq/L	Detected and Quantified	F	Actual				7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	17.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	7/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	69.8174 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	28.33754 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	69.65643 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	11.00289 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	151.94527 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	41.7426 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	20.49274 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	178.82076 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	174.11626 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97369	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 7/10/2007 10:45 AM EDT

Activity: 070710104501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	22.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070710104502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No
Activity Comment: Solar controller seemed to short out when I tested voltage. I just un/replugged batt in: fine.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.87 ft	Detected and Quantified	F	Actual								
WatLev_Chart	2.87 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.87 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.94 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.48 volts	Detected and Quantified	F	Actual								

Activity: 070710104503 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9892	Detected and Quantified	F	Actual				7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	104.70542 µeq/L	Detected and Quantified	F	Actual				7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	73.50977 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	29.86472 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	72.70482 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	11.98181 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	154.1184 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.21544 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	41.47399 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	20.65433 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	188.27656 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	166.87424 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.88633	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** STAN **Visit Date:** 7/17/2007 10:58 AM EDT

Visit Comment: Swimmers in pool at STAN site. Sample taken on Rapidan below confluence with Staunton. Sample will not be analyzed.

Activity: 070717105801 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								

weather	0	Detected and Quantified	F	Actual
water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	NORMAL	Detected and Quantified	F	Actual

Activity: 070717105802 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.86 ft	Detected and Quantified	F	Actual								
WatLev_Chart	2.87 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.86 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.93 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.46 volts	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 7/25/2007 12:20 PM EDT

Activity: 070725122001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070725122002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.82 ft	Detected and Quantified	F	Actual								
WatLev_Chart	2.84 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.83 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.92 volts	Detected and Quantified	F	Actual								

voltage_solarLoad	13.55 volts	Detected and Quantified	F	Actual

Activity: 070725122003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9537	Detected and Quantified	F	Actual				7/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	97.47739 µeq/L	Detected and Quantified	F	Actual				7/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	69.51732 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	28.5315 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	73.27668 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	11.58447 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	152.96513 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	42.60181 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.32947 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	182.91647 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	161.44917 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.88264	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 070725122004 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 8/1/2007 11:30 AM EDT

Activity: 070801113001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	23.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070801113002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.82 ft	Detected and Quantified	F	Actual								
WatLev_Chart	2.83 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.88 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.91 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.02 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

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Activity: 070801113003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.0843	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	100.81559 µeq/L	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	73.57935 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	30.00566 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	74.48911 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	12.35198 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	152.23953 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	1.62222 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	45.06211 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.55975 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	190.4326 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	169.05967 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.88777	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 8/7/2007 10:40 AM EDT

Activity: 070807104001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	21.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070807104002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.80 ft	Detected and Quantified	F	Actual								
WatLev_Chart	2.84 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.89 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.91 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.68 volts	Detected and Quantified	F	Actual								

Activity: 070807104003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.0853	Detected and Quantified	F	Actual				8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	104.07728 µeq/L	Detected and Quantified	F	Actual				8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	18.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	74.23047 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	29.89418 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	74.29326 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	12.56593 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	152.8244 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	44.09589 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	20.64861 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	190.99034 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	168.86228 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.88414	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 8/15/2007 2:22 PM EDT

Activity: 070815142201 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070815142202 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	*Not Reported	*Not Reported	F	Actual								
WatLev_Chart	2.43 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.57 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.90 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.65 volts	Detected and Quantified	F	Actual								

Activity: 070815142203 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5323	Detected and Quantified	F	Actual				8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	114.9845 µeq/L	Detected and Quantified	F	Actual				8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	73.27016 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	29.50388 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	74.45339 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	12.71492 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	155.16467 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	45.65374 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	20.85712 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	189.94885 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	181.53586 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95571	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** STAN **Visit Date:** 8/21/2007 12:07 PM EDT

Activity: 070821120701 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.8 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								

flow_streamStage	NORMAL	Detected and Quantified	F	Actual

Activity: 070821120702 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.90 ft	Detected and Quantified	F	Actual								
WatLev_Chart	2.91 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	3.05 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	0.91 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.85 volts	Detected and Quantified	F	Actual								

Activity: 070821120703 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9001	Detected and Quantified	F	Actual				8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	102.6311 µeq/L	Detected and Quantified	F	Actual				8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	75.58209 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	30.10518 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	70.93468 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	12.79805 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	149.05433 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.88301 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	42.80659 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	20.15488 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	189.4265 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	166.47558 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.87884	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** STAN **Visit Date:** 8/27/2007 11:40 AM EDT

Activity: 070827114001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	20.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070827114002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Activity Comment: Solar battery shorted when I tried to take voltage reading; had to reset Axsys.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.96 ft	Detected and Quantified	F	Actual								
WatLev_Chart	2.97 ft	Detected and Quantified	F	Actual								

WatLev_AXSYS	2.96 ft	Detected and Quantified	F	Actual
voltage_StevensClock	8.89 volts	Detected and Quantified	F	Actual
voltage_solarLoad	13.41 volts	Detected and Quantified	F	Actual

Activity: 070827114003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8178	Detected and Quantified	F	Actual				8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	124.70626 µeq/L	Detected and Quantified	F	Actual				8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	81.28427 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	33.05389 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	74.77986 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	13.23944 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	155.67232 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	46.13146 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	18.79034 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	202.36396 µeq/L	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				
SAA_MET_IC2_GRAB	189.66856 µeq/L	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				
IONRATIO_MET_IC2_GRAB	0.93726	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** STAN **Visit Date:** 9/9/2007 11:52 AM EDT

Activity: 070909115201 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	20.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070909115202 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	*Not Reported	*Not Reported	F	Actual								
WatLev_Chart	2.39 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.39 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.88 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.49 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

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Activity: 070909115203 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.0008	Detected and Quantified	F	Actual				9/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	108.85016 µeq/L	Detected and Quantified	F	Actual				9/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		9/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	76.64186 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	30.81996 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	77.20756 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	13.18087 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	158.22988 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	44.53123 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.64613 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	197.85675 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	175.06802 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.88482	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 9/11/2007 9:20 AM EDT
Visit Comment: Water Monitoring Station sign (placed by SHEN) was in pool.

Activity: 070911092001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Suzanne Maben **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	21.0 °C	Detected and Quantified	F	Actual								
weather	8	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 070911092002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Suzanne Maben **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.89 ft	Detected and Quantified	F	Actual								
WatLev_Chart	2.89 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.90 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.88 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.75 volts	Detected and Quantified	F	Actual								

Activity: 070911092003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Suzanne Maben **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6023	Detected and Quantified	F	Actual				9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	120.81515 µeq/L	Detected and Quantified	F	Actual				9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	17.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	77.44439 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	31.3625 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	74.36751 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	13.3891 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	155.4775 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	1.91209 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	2.01898 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	42.49376 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.74681 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	198.47559 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	187.0747 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94256	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 9/20/2007 10:40 AM EDT

Activity: 070920104001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Suzanne Maben\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 070920104002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Suzanne Maben\Zachary Lucy **QC Sample?:** No
Activity Comment: Staff is out of water

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	*Not Reported	*Not Reported	F	Actual								
WatLev_Chart	2.41 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.41 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.85 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.22 volts	Detected and Quantified	F	Actual								

Activity: 070920104003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Suzanne Maben\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5262	Detected and Quantified	F	Actual				9/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	116.76663 µeq/L	Detected and Quantified	F	Actual				9/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		9/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	73.22451 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	30.21349 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	74.11917 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	11.88161 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	155.50138 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	44.51791 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.46138 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	189.44528 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	182.78642 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96485	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070920104004 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Suzanne Maben\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

NPSTORET Results with Comments

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Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 9/25/2007 11:02 AM EDT

Activity: 070925110201 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr.\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	20.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 070925110202 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr.\Zachary Lucy **QC Sample?:** No
Activity Comment: Staff out of water

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	*Not Reported	*Not Reported	F	Actual								
WatLev_Chart	2.35 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.35 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.85 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.23 volts	Detected and Quantified	F	Actual								

Activity: 070925110203 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr.\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6877	Detected and Quantified	F	Actual				9/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	119.2417 µeq/L	Detected and Quantified	F	Actual				9/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		9/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	73.67571 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	30.18365 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	75.4458 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	12.31184 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	157.23117 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	1.64347 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	43.99123 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.68928 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	191.6235 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	186.56568 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97361	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** STAN **Visit Date:** 10/2/2007 11:51 AM EDT

Activity: 071002115101 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.0 °C	Detected and Quantified	F	Actual								

weather	1	Detected and Quantified	F	Actual
water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	LOW	Detected and Quantified	F	Actual

Activity: 071002115102 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Staff is out of the water

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	*Not Reported	*Not Reported	F	Actual								
WatLev_Chart	2.48 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.50 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.83 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.00 volts	Detected and Quantified	F	Actual								

Activity: 071002115103 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7285	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	114.73304 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	18.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	73.91421 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	30.34858 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	75.096 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	12.08432 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	156.1145 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	45.29788 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	21.82793 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	191.44961 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	181.89935 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.95012	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 071002115104 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 10/9/2007 10:20 AM EDT

Activity: 071009102001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	20.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071009102002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Water level below staff

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	*Not Reported	*Not Reported	F	Actual								
WatLev_Chart	2.34 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.36 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.83 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.89 volts	Detected and Quantified	F	Actual								

Activity: 071009102003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6926	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	121.78999 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	18.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/11/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	74.31829 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	30.60467 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	77.51125 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	13.28802 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	157.29682 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.5569 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/26/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	0.95385 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	45.19188 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.43511 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/26/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	196.27913 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	190.37083 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9699	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** STAN **Visit Date:** 10/15/2007 10:30 AM EDT

Visit Comment: Water level has increased. Still cannot take staff height measurement.

Activity: 071015103001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071015103002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Activity Comment: Photovoltaic controller malfunctioned when I applied voltmeter to it. Had to reset height after unplugging/plugging in battery. OK now.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	*Not Reported	*Not Reported	F	Actual								
WatLev_Chart	2.86 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.86 ft	Detected and Quantified	F	Actual								

voltage_StevensClock	8.82 volts	Detected and Quantified	F	Actual
voltage_solarLoad	*Not Reported	*Not Reported	F	Actual

Activity: 071015103003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.509	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	116.8458 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	18.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	75.27928 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	30.80144 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	77.71369 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	12.81939 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	158.08438 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	46.4774 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	24.86341 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	196.6203 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	188.22711 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.95731	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 071015103004 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 10/22/2007 11:30 AM EDT

Activity: 071022113001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071022113002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Changed AXSYS height.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	*Not Reported	*Not Reported	F	Actual								
WatLev_Chart	2.90 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.90 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.80 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.52 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

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Activity: 071022113003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8365	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	115.97582 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	19.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/25/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	78.18764 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	31.60819 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	78.24574 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	13.70509 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	154.89201 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	46.16597 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	27.77736 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	201.75316 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	189.95965 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.94154	Detected and Quantified	F	Actual				4/23/2008				

Dilution: N *Recovery:* N *Correction:* N

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 10/30/2007 10:50 AM EDT
Visit Comment: 3 days of rain since last visit.

Activity: 071030105001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071030105002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Changed AXSYS height; changed solar battery.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	*Not Reported	*Not Reported	F	Actual								
WatLev_Chart	2.91 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.91 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.79 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.30 volts	Detected and Quantified	F	Actual								

Activity: 071030105003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8309	Detected and Quantified	F	Actual				11/2/2007				

Dilution: N *Recovery:* N *Correction:* N

ANC_Metrohm_Grab	112.20878 µeq/L	Detected and Quantified	F	Actual			11/2/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	18.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	11/2/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	74.73285 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	31.82424 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	71.24958 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	12.80345 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	152.51634 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.51369 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	45.80699 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	25.64469 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	190.61662 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	184.17415 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9662	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071030105004 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 11/5/2007 11:30 AM EST

Activity: 071105113001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071105113002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Wire came off pulley. Chart and AXSYS heights are 0.1' lower than true value.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	*Not Reported	*Not Reported	F	Actual								
WatLev_Chart	2.76 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	2.76 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.78 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.00 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

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Activity: 071105113003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7212	Detected and Quantified	F	Actual				11/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	102.85074 µeq/L	Detected and Quantified	F	Actual				11/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	70.47316 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	29.22559 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	69.06408 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	11.81317 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	148.96031 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	45.4833 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	24.46266 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	180.5825 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	172.8372 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.95711	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 11/12/2007 11:15 AM EST

Activity: 071112111501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	8.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071112111502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Chart height decreased significantly as I marked the paper. Wire came off pulley last week - now one bead low. Chart and AXSYS heights are 0.5' lower than true value.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.93 ft	Detected and Quantified	F	Estimated								
Result Comment: Chart and AXSYS were one chain bead off (0.5 feet)												
voltage_StevensClock	8.75 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.90 volts	Detected and Quantified	F	Actual								

Activity: 071112111503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8141	Detected and Quantified	F	Actual				11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	100.89722 µeq/L	Detected and Quantified	F	Actual				11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	16.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	68.77523 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	28.88623 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	67.58739 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	11.20412 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	144.29034 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.81461 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	44.20243 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	24.46014 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	176.45947 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	170.3744 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96552	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Activity: 071112111504 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Activity: 071112111505 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
discharge velocity	2.4552 ft/sec	Detected and Quantified	F	Calculated								

Activity: 071112111505 **Activity Type:** Quality Control Field Replicate Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
discharge velocity	2.3376 ft/sec	Detected and Quantified	F	Calculated								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 11/20/2007 11:00 AM EST

Activity: 071120110001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071120110002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Chart and AXSYS heights are 0.5' lower than true value.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	*Not Reported	*Not Reported	F	Actual								
voltage_StevensClock	8.74 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.80 volts	Detected and Quantified	F	Actual								

Activity: 071120110003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9925	Detected and Quantified	F	Actual				11/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	103.99218 µeq/L	Detected and Quantified	F	Actual				11/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	69.17419 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	28.97212 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	67.94 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	11.50453 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	145.65199 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	44.50153 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	24.31536 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	177.59734 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	172.84957 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.97327	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** STAN **Visit Date:** 11/27/2007 10:15 AM EST

Activity: 071127101501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071127101502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Activity Comment: Adjusted ISCO flow actuator to winter height. Chart and AXSYS heights are 0.5' lower than true value.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	*Not Reported	*Not Reported	F	Actual								
voltage_StevensClock	8.73 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.70 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071127101503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9379	Detected and Quantified	F	Actual				11/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	105.95159 µeq/L	Detected and Quantified	F	Actual				11/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	69.47518 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	29.60939 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	68.24756 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	12.31025 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	148.37634 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	44.4554 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	24.78247 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	179.64888 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	175.22996 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.9754	Detected and Quantified	F	Actual				4/23/2008					

Dilution: N *Recovery:* N *Correction:* N

Activity: 071127101504 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 12/3/2007 11:30 AM EST

Activity: 071203113001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071203113002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Chart and AXSYS heights are 0.5' below true value.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	2.95 ft	Detected and Quantified	F	Estimated								
Result Comment: AXSYS was one bead off (0.5 feet)												
voltage_StevensClock	8.72 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.60 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071203113003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9275	Detected and Quantified	F	Actual				12/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	100.40132 µeq/L	Detected and Quantified	F	Actual				12/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		12/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	68.26678 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	28.72582 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	65.93625 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	11.15906 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	147.20859 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	44.03137 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	24.08848 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	174.09441 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	168.56167 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.96822	Detected and Quantified	F	Actual				4/23/2008					

Dilution: N *Recovery:* N *Correction:* N

Activity: 071203113004 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
discharge velocity	1.3008 ft/sec	Detected and Quantified	F	Calculated								

Activity: 071203113004 **Activity Type:** Quality Control Field Replicate Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
discharge velocity	1.9248 ft/sec	Detected and Quantified	F	Calculated								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 12/10/2007 11:40 AM EST

Activity: 071210114001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071210114002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Chart and AXSYS heights are 0.5' below true value.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	*Not Reported	*Not Reported	F	Actual								
voltage_StevensClock	8.70 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.10 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071210114003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7415	Detected and Quantified	F	Actual				12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	98.38758 µeq/L	Detected and Quantified	F	Actual				12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	66.26534 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	28.27738 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	64.46249 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.86946 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	143.31794 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	42.97269 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	23.30016 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	169.88117 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	164.70093 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.96951	Detected and Quantified	F	Actual				4/23/2008					

Dilution: N *Recovery:* N *Correction:* N

Activity: 071210114004 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** STAN **Visit Date:** 12/18/2007 10:45 AM EST

Activity: 071218104501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	4.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071218104502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Chart and AXSYS heights are 0.5' lower than true value.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	*Not Reported	*Not Reported	F	Actual								
voltage_StevensClock	8.69 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.10 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071218104503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9557	Detected and Quantified	F	Actual				12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	100.60904 µeq/L	Detected and Quantified	F	Actual				12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	70.0769 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
Mg_Ions_Grab	30.18913 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
Na_Ions_Grab	64.76407 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
K_Ions_Grab	10.6405 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
SiO2_TC_Grab	142.85476 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	45.98321 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												

Cl_Ions_Grab	23.65047 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SBC_IC2_GRAB	175.6771 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	170.28322 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9693	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** STAN **Visit Date:** 12/27/2007 10:20 AM EST

Activity: 071227102001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071227102002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Activity Comment: Chart and AXSYS heights are 0.5' lower than true value.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	*Not Reported	*Not Reported	F	Actual								
voltage_StevensClock	8.66 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.1 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071227102003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6897	Detected and Quantified	F	Actual				1/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	86.36185 µeq/L	Detected and Quantified	F	Actual				1/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: estimated 1/8/08												
Ca_Ions_Grab	65.50572 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
Mg_Ions_Grab	28.11175 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
Na_Ions_Grab	63.02363 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
K_Ions_Grab	9.97696 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
SiO2_TC_Grab	139.55066 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												

SO4_Ions_Grab	46.85446 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
Cl_Ions_Grab	23.74387 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SBC_IC2_GRAB	166.62456 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	157.00068 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94224	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071227102004 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 1/2/2007 11:00 AM EST
Visit Comment: FAD //pipe could be plugged
Stevens datalogger appeared to have reset.
Data did not copy to the card
//clear, cool
some rain

Activity: 070102110001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0852	Detected and Quantified	F	Actual				1/4/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	21.48573 µeq/L	Detected and Quantified	F	Actual			1/4/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	17 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	1/4/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_Grab	30.04566 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/8/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	47.56066 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/8/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	19.54969 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/8/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	34.73817 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/8/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	78.584 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/8/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	8/8/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	80.55403 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/8/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	18.68092 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/8/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	131.90068 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	120.76118 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.91555	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07010211000F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7.5 °C	Detected and Quantified	F	Actual				1/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 1/9/2007 12:10 PM EST
Visit Comment: FAD //slow 2-day rise in hydrograph
//clear, cold
mild, rain

Activity: 070109121001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.1001	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	19.50109 µeq/L	Detected and Quantified	F	Actual				1/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/11/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	29.92392 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	46.61547 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	19.31613 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	34.63423 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	79.033 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	79.84496 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	18.71527 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	130.49625 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	118.10182 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.90502	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07010912100F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7.5 °C	Detected and Quantified	F	Actual				1/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 1/16/2007 11:55 AM EST
Visit Comment: FAD //
//cloudy, cold
mild, fairly dry

Activity: 070116115501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2198	Detected and Quantified	F	Actual				1/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	20.89457 µeq/L	Detected and Quantified	F	Actual			1/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	17.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	1/18/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_Grab	29.89263 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	47.42745 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	19.9041 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	36.80561 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	78.983 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	81.28136 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	18.9538 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	134.03629 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	121.17023 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.90401	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07011611550F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9 °C	Detected and Quantified	F	Actual				1/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 1/23/2007 11:30 AM EST
Visit Comment: FAD //
//cloudy, cold
light snow

Activity: 070123113001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0791	Detected and Quantified	F	Actual				1/25/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	19.34096 µeq/L	Detected and Quantified	F	Actual				1/25/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/25/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	30.66495 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	48.95021 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	19.61094 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	33.88519 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	75.049 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	1.98476 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	82.06368 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	18.51456 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	133.11779 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	121.90396 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.91576	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07012311300F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	5.5 °C	Detected and Quantified	F	Actual				1/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 1/30/2007 12:15 PM EST
Visit Comment: FAD //
//cloudy, cold.
cold, dry.

Activity: 070130121501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2273	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	20.42357 µeq/L	Detected and Quantified	F	Actual			2/1/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	17.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	2/1/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_Grab	30.76079 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	50.52619 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	19.75713 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	33.3266 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	72.741 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	5.14938 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	82.47489 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	18.35671 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	134.37721 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	126.40455 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94067	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07013012150F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	3.5 °C	Detected and Quantified	F	Actual				1/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 2/6/2007 11:35 AM EST
Visit Comment: FAD //
//brutally cold.
Dry, getting colder.

Activity: 070206113501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.1247	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	21.30187 µeq/L	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/8/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	31.35288 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	50.64047 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	19.95109 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	32.6136 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	72.409 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	6.65513 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	84.02466 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	18.71119 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	134.56454 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	130.69285 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97123	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07020611350F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	1 °C	Detected and Quantified	F	Actual				2/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 2/14/2007 11:45 AM EST
Visit Comment: FAD //
//cold today
wintry mix last night

Activity: 070214114501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.1657	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	20.75874 µeq/L	Detected and Quantified	F	Actual			2/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	17.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	2/16/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_Grab	30.78398 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	51.01359 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	19.74639 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	32.79945 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	69.106 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	7.09964 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	79.7415 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	18.12849 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	134.34991 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	125.72837 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93583	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07021411450F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	2 °C	Detected and Quantified	F	Actual				2/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 2/20/2007 11:20 AM EST
Visit Comment: FAD //
//cool, cloudy
cold, some snow

Activity: 070220112001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.9842	Detected and Quantified	F	Actual				3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	23.38662 µeq/L	Detected and Quantified	F	Actual				3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	30.415 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	50.35223 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	20.11912 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	32.57924 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	70.334 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	77.14391 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	18.35657 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	133.47209 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	118.9276 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.89103	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07022011200F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	3 °C	Detected and Quantified	F	Actual				2/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 2/27/2007 11:20 AM EST
Visit Comment: FAD //
//clear, cool
some frozen precip

Activity: 070227112001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2496	Detected and Quantified	F	Actual				3/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	22.54644 µeq/L	Detected and Quantified	F	Actual			3/1/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	16.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	3/1/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_Grab	30.10935 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	48.09653 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	20.05543 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	32.9819 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	74.468 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	79.78013 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	18.25791 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/30/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	131.24971 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	120.62498 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.91905	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07022711200F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	4.5 °C	Detected and Quantified	F	Actual				2/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 3/6/2007 11:20 AM EST
Visit Comment: FAD //
//clear, cold
significant rain

Activity: 070306112001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.1965	Detected and Quantified	F	Actual				3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	18.65678 µeq/L	Detected and Quantified	F	Actual				3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/8/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	28.6202 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	46.09572 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	19.41139 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	32.33235 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	74.766 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	80.55297 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	17.92242 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	126.46616 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	117.17267 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.92651	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07030611200F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	4.5 °C	Detected and Quantified	F	Actual				3/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 3/13/2007 12:40 PM EDT
Visit Comment: FAD //
//WARM, CLOUDY
dry

Activity: 070313124001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2231	Detected and Quantified	F	Actual				3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	21.21654 µeq/L	Detected and Quantified	F	Actual			3/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	16.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	3/15/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_Grab	28.1858 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	45.61091 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	19.95998 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	34.38971 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	73.372 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	81.33294 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	18.10854 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	128.1529 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	120.69852 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94183	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07031312400F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7.5 °C	Detected and Quantified	F	Actual				3/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 3/20/2007 12:35 PM EDT
Visit Comment: FAD //
//clear, mild
rain and snow at higher elevations

Activity: 070320123501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.1409	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	16.78841 µeq/L	Detected and Quantified	F	Actual				3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/21/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	27.41853 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	45.4484 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	18.93415 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	34.84427 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	75.015 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	2.15028 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	82.45499 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	17.80796 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	126.65185 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	119.20164 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94118	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07032012350F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	8.5 °C	Detected and Quantified	F	Actual				3/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 3/27/2007 11:30 AM EDT
Visit Comment: FAD //
//couldy, warm spring-like

Activity: 070327113001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.9463	Detected and Quantified	F	Actual				4/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	18.95842 µeq/L	Detected and Quantified	F	Actual			4/3/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	17.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	4/3/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_Grab	28.23229 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	45.1884 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	19.65783 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	36.99919 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	75.779 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	81.46894 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	18.40001 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	130.08421 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	118.86787 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.91378	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07032711300F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11 °C	Detected and Quantified	F	Actual				3/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 4/3/2007 12:20 PM EDT
Visit Comment: FAD //
//warm, sunny
mostly dry

Activity: 070403122001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2733	Detected and Quantified	F	Actual				4/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	20.86546 µeq/L	Detected and Quantified	F	Actual				4/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/5/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	28.39066 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	45.43867 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	19.75543 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	37.12451 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	75.397 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	3.54676 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	81.14846 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	18.37756 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	130.71577 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	123.93824 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94815	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07040312200F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12 °C	Detected and Quantified	F	Actual				4/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 4/10/2007 12:50 PM EDT
Visit Comment: FAD //
//clear, cool some rain

Activity: 070410125001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0149	Detected and Quantified	F	Actual				4/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	18.57452 µeq/L	Detected and Quantified	F	Actual			4/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	17.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	4/16/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_Grab	28.67863 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	46.33562 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	19.66675 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	34.67947 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	70.948 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	3.2142 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	81.45472 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	17.92916 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	129.36697 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	121.1726 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93666	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Activity: 07041012500F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	8 °C	Detected and Quantified	F	Actual				4/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 4/18/2007 12:05 PM EDT

Activity: 070418120501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9.0 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	ABOVE NORMAL	Detected and Quantified	F	Actual								
days_since_precip	4 days	Detected and Quantified	F	Actual								

Activity: 070418120502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	1.08 ft	Detected and Quantified	F	Actual								
WatLev_Chart	1.10 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	*Absent	*Absent	F	Actual								
voltage_StevensClock	9.05 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	14.39 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070418120503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0508	Detected and Quantified	F	Actual				4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	15.22105 µeq/L	Detected and Quantified	F	Actual				4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		4/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	28.61556 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	46.28077 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	18.72073 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	36.25798 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	74.37394 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	82.70569 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	17.8341 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/14/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	129.88154 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	115.80134 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.89159	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 4/24/2007 1:15 PM EDT

Activity: 070424131501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
days_since_precip	8 days	Detected and Quantified	F	Actual								

Activity: 070424131502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No
Activity Comment: bees in gage house

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.70 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.69 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	*Not Reported	*Not Reported	F	Actual								
voltage_StevensClock	*Not Reported	*Not Reported	F	Actual								
voltage_solarLoad	13.94 volts	Detected and Quantified	F	Actual								

Activity: 070424131503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2306	Detected and Quantified	F	Actual				4/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	19.7175 µeq/L	Detected and Quantified	F	Actual			4/26/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	17.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	4/26/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	28.56688 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	44.16442 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	19.78777 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	38.34144 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	73.59703 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	82.02056 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	18.43774 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	130.86701 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	120.2163 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.91861	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070424131504 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 5/2/2007 12:40 PM EDT

Activity: 070502124001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	1 days	Detected and Quantified	F	Actual								

Activity: 070502124002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No
Activity Comment: reinstalled axsys

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.56 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.54 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.56 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	9.05 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.89 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070502124003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.205	Detected and Quantified	F	Actual				5/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	25.35596 µeq/L	Detected and Quantified	F	Actual				5/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	27.96872 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	45.31312 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	20.33231 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	40.72236 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	75.36798 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	80.74869 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	18.58322 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	134.34301 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	124.72837 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.92843	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 5/8/2007 1:00 PM EDT

Activity: 070508130001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070508130002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.80 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.80 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.82 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	9.02 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	14.01 volts	Detected and Quantified	F	Actual								

Activity: 070508130003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2551	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	21.50246 µeq/L	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	15.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	5/10/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	27.62186 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	44.70604 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	19.6209 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	37.15242 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	77.58508 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	80.28302 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	18.3985 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	129.10772 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	120.22448 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9312	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 5/15/2007 12:25 PM EDT

Activity: 070515122501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070515122502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.53 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.53 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.54 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	9.02 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.39 volts	Detected and Quantified	F	Actual								

Activity: 070515122503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2544	Detected and Quantified	F	Actual				5/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	25.90421 µeq/L	Detected and Quantified	F	Actual				5/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	28.83674 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	47.01247 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	20.46157 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	40.19335 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	79.1392 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	80.17295 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	18.89988 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	136.51063 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	125.01754 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.91581	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 5/22/2007 12:15 PM EDT

Activity: 070522121501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								

flow_streamStage	NORMAL	Detected and Quantified	F	Actual

Activity: 070522121502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.46 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.45 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.47 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	9.00 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.29 volts	Detected and Quantified	F	Actual								

Activity: 070522121503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Frank A. Deviney, Jr. **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2704	Detected and Quantified	F	Actual				5/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	31.8885 µeq/L	Detected and Quantified	F	Actual				5/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	31.06842 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	50.40972 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	20.93665 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	41.64691 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	81.08262 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	80.48272 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	18.49502 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/17/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	144.0682 µeq/L	Detected and Quantified	F	Actual				3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	130.90674 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.90864	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 5/29/2007 1:35 PM EDT

Visit Comment: Tag missing, possibly on missing bark?

Activity: 070529133501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	16.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070529133502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.40 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.40 ft	Detected and Quantified	F	Actual								

WatLev_AXSYS	0.41 ft	Detected and Quantified	F	Actual
voltage_StevensClock	8.97 volts	Detected and Quantified	F	Actual
voltage_solarLoad	13.22 volts	Detected and Quantified	F	Actual

Activity: 070529133503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.3732	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	40.18164 µeq/L	Detected and Quantified	F	Actual				5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	32.96749 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	53.90962 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	21.64545 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	44.90036 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	83.23572 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	58.3644 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	18.8544 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	153.42942 µeq/L	Detected and Quantified	F	Actual		3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N				
SAA_MET_IC2_GRAB	117.44094 µeq/L	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				
IONRATIO_MET_IC2_GRAB	0.76544	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 6/4/2007 11:50 AM EDT

Activity: 070604115001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	16.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070604115002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.42 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.44 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.44 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.96 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.01 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070604115003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.3737	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	38.5634 µeq/L	Detected and Quantified	F	Actual				6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/7/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	33.94774 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	54.31458 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	21.56989 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	45.50046 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	85.75716 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.24343 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	4.25468 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	75.99199 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	18.35623 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/17/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	155.5761 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	137.1663 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.88167	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 6/11/2007 12:03 PM EDT

Activity: 070611120301 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070611120302 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.32 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.37 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.38 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.95 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.18 volts	Detected and Quantified	F	Actual								

Activity: 070611120303 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2455	Detected and Quantified	F	Actual				6/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	38.92441 µeq/L	Detected and Quantified	F	Actual				6/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	17.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	6/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	32.90032 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	53.95426 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	22.69105 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	46.93862 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	88.08677 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.43016 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	2.6934 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	78.04734 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	19.57063 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	156.91441 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	139.23578 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.88734	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 6/18/2007 11:43 AM EDT

Activity: 0706181143 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	19.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070618114302 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.28 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.25 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.30 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.94 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.96 volts	Detected and Quantified	F	Actual								

Activity: 070618114303 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5491	Detected and Quantified	F	Actual				6/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	43.74459 µeq/L	Detected and Quantified	F	Actual				6/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/20/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	34.05614 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	55.67523 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	23.90836 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	48.08442 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	91.41402 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	4.26008 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	3.38961 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	77.19521 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	19.98636 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	165.98423 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	144.31577 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.86945	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 6/26/2007 7:25 AM EDT

Activity: 070626072501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	20.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								

flow_streamStage	LOW	Detected and Quantified	F	Actual

Activity: 070626072502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.22 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.24 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.24 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.94 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.6 volts	Detected and Quantified	F	Actual								

Activity: 070626072503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4387	Detected and Quantified	F	Actual				6/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	55.66687 µeq/L	Detected and Quantified	F	Actual				6/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	20.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		6/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	41.52116 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	65.2429 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	24.28136 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	51.66952 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/3/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	91.80262 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	0.18321 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	15.58248 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	78.74745 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	20.2947 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/3/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	182.89815 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	170.2915 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93107	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 7/4/2007 11:54 AM EDT

Activity: 070704115401 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	22.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070704115402 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.27 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.25 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.26 ft	Detected and Quantified	F	Actual								

voltage_StevensClock	8.93 volts	Detected and Quantified	F	Actual
voltage_solarLoad	12.96 volts	Detected and Quantified	F	Actual

Activity: 070704115403 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4697	Detected and Quantified	F	Actual				8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	59.48881 µeq/L	Detected and Quantified	F	Actual				8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	39.00814 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	63.13874 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	23.81615 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	51.2652 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	95.49634 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	4.33305 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	4.10961 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	69.20129 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	20.06438 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/4/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	181.56128 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	152.86409 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.84194	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 7/9/2007 11:00 AM EDT

Activity: 070709110001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	23.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 070709110002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.20 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.20 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.20 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.93 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.96 volts	Detected and Quantified	F	Actual								

Activity: 070709110003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5348	Detected and Quantified	F	Actual				7/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	59.81826 µeq/L	Detected and Quantified	F	Actual			7/19/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	20.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	7/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	40.47245 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	65.71518 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	25.78858 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	54.65456 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	95.10735 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	1.60293 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	63.87486 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.83804 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/4/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	188.2337 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	145.57166 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.77336	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 7/18/2007 12:40 PM EDT

Activity: 070718124001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	22.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070718124002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.20 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.10 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.11 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.92 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.93 volts	Detected and Quantified	F	Actual								

Activity: 070718124003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.256	Detected and Quantified	F	Actual				7/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	51.70368 µeq/L	Detected and Quantified	F	Actual				7/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	20.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	38.69177 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	61.32317 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	26.96448 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	53.90708 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	101.53101 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	7.39897 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	10.50491 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	78.20279 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	23.25021 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	188.28547 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	163.66159 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.86922	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 7/24/2007 2:47 PM EDT

Activity: 070724144701 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	22.0 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								

flow_streamStage	NO FLOW	Detected and Quantified	F	Actual

Activity: 070724144702 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.02 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.05 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.05 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.91 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.94 volts	Detected and Quantified	F	Actual								

Activity: 070724144703 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0819	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	60.6722 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	21.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	42.82747 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	63.90867 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	25.94391 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	57.38968 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	100.46833 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	7.80605 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	2.25856 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	85.28649 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.13993 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	197.87578 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	169.35718 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.85588	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 7/31/2007 12:45 PM EDT
Visit Comment: Staff at zero. Took sample from pool.

Activity: 070731124501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NO FLOW	Detected and Quantified	F	Actual								

Activity: 070731124502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.00 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.01 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.02 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.90 volts	Detected and Quantified	F	Actual								

voltage_solarLoad	12.70 volts	Detected and Quantified	F	Actual

Activity: 070731124503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.0128	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	225.49881 µeq/L	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	29.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	125.31773 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	115.24027 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	49.61354 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	34.55708 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	167.20667 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	1.46631 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	59.30647 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.65176 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	326.19493 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	306.49754 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.93961	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 070731124504 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 8/8/2007 10:40 AM EDT

Activity: 070808104001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	19.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NO FLOW	Detected and Quantified	F	Actual								

Activity: 070808104002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.097 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.11 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.10 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.90 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.6 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070808104003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2154	Detected and Quantified	F	Actual				8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	91.81376 µeq/L	Detected and Quantified	F	Actual				8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	27 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	63.5367 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	89.49767 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	27.4244 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	68.16582 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	106.10295 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	11.17111 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	13.99619 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	93.8378 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	25.4949 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	259.7957 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	225.14265 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.86661	Detected and Quantified	F	Actual		4/23/2008

Dilution: N *Recovery:* N *Correction:* N

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 8/15/2007 12:31 PM EDT
Visit Comment: no sample. Water extremely stagnant & algae filled in the small pools remaining

Activity: 070815123101 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	21.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NO FLOW	Detected and Quantified	F	Actual								

Activity: 070815123102 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.0 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.01 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.01 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.90 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.77 volts	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 8/22/2007 2:30 PM EDT

Activity: 070822143001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	22.0 °C	Detected and Quantified	F	Actual								

weather	1	Detected and Quantified	F	Actual
water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	NORMAL	Detected and Quantified	F	Actual

Activity: 070822143002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No
Activity Comment: Changed solar battery, now at 12.94.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.35 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.36 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.35 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.89 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.63 volts	Detected and Quantified	F	Actual								

Activity: 070822143003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5374	Detected and Quantified	F	Actual				8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	59.66654 µeq/L	Detected and Quantified	F	Actual				8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	21.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/23/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	46.76097 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	73.41684 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	26.54097 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	59.86934 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	107.47357 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	36.88485 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	77.17645 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.55517 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	206.59462 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	195.28301 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94525	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 8/29/2007 11:40 AM EDT

Activity: 070829104003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2199	Detected and Quantified	F	Actual				8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	60.69708 µeq/L	Detected and Quantified	F	Actual				8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	40.3543 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	63.76645 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	24.42254 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	53.28442 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	104.0134 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	3.7329 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	8.32223 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	77.73346 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	19.57923 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	185.56061 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	166.332 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.89638	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070829114001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	19.2 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070829114002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.31 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.33 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.34 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.89 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.88 volts	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 9/5/2007 11:43 AM EDT

Activity: 070905114301 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	19.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 070905114302 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.22 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.22 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.23 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.88 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.79 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070905114303 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.1125	Detected and Quantified	F	Actual				9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	66.91126 µeq/L	Detected and Quantified	F	Actual				9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	20.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		9/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	42.98195 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	66.96747 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	26.75121 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	56.72756 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	101.3244 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.74269 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	11.34298 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	80.94785 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.13283 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/21/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	194.17088 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	180.33492 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.92874	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 9/12/2007 11:42 AM EDT

Activity: 070912114201 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								

Activity: 070912114202 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.20 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.19 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.22 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.87 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.74 volts	Detected and Quantified	F	Actual								

Activity: 070912114203 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.1815	Detected and Quantified	F	Actual				9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	64.67021 µeq/L	Detected and Quantified	F	Actual				9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	20.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	42.6478 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	65.15985 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	25.5997 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	56.0765 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	101.90045 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	4.50473 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	14.39533 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	78.48987 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.06409 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/21/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	193.98858 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	179.6195 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.92593	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 9/19/2007 11:20 AM EDT

Activity: 070919112001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	INTERSTITIAL	Detected and Quantified	F	Actual								

Activity: 070919112002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.07 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.07 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.09 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.65 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.66 volts	Detected and Quantified	F	Actual								

Activity: 070919112003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.8098	Detected and Quantified	F	Actual				9/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	62.51546 µeq/L	Detected and Quantified	F	Actual				9/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	21.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		9/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	41.06072 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	64.14634 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	25.49572 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	53.4742 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	100.17258 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.20627 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	15.87338 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	80.99777 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.10512 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	184.38325 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	180.49173 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97889	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 9/26/2007 11:45 AM EDT

Visit Comment: No sample taken - level too low

Activity: 070926114501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tamara Doucette\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								

water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	NO FLOW	Detected and Quantified	F	Actual

Activity: 070926114502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tamara Doucette\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.00 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.05 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.05 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.84 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.57 volts	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 10/3/2007 12:36 PM EDT
Visit Comment: Dry - no sample taken

Activity: 071003123601 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Suzanne Maben\Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071003123602 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Suzanne Maben\Zachary Lucy **QC Sample?:** No
Activity Comment: Staff out of the water. Dug out stilling well inlet pipe.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	*Not Reported	*Not Reported	F	Actual								
WatLev_Chart	0.03 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.05 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.83 volts	Detected and Quantified	F	Actual								

voltage_solarLoad	13.09 volts	Detected and Quantified	F	Actual

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 10/8/2007 12:56 PM EDT
Visit Comment: Dry - no sample taken

Activity: 071008125601 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NO FLOW	Detected and Quantified	F	Actual								

Activity: 071008125602 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Staff out of the water

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	*Not Reported	*Not Reported	F	Actual								
WatLev_Chart	0.02 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.05 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.83 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.00 volts	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 10/16/2007 12:00 PM EDT
Visit Comment: No flow in stream - no sample taken

Activity: 071016120001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								

weather	1	Detected and Quantified	F	Actual
water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	NO FLOW	Detected and Quantified	F	Actual

Activity: 071016120002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Staff out of the water

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	*Not Reported	*Not Reported	F	Actual								
WatLev_Chart	0.01 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.04 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.82 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.93 volts	Detected and Quantified	F	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 10/23/2007 10:20 AM EDT
Visit Comment: Dry-no sample collected

Activity: 071023102001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Stagnant pools; no flow.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NO FLOW	Detected and Quantified	F	Actual								

Activity: 071023102003 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Staff out of the water

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	*Not Reported	*Not Reported	F	Actual								

WatLev_Chart	0.0 ft	Detected and Quantified	F	Actual
WatLev_AXSYS	0.03 ft	Detected and Quantified	F	Actual
voltage_StevensClock	8.81 volts	Detected and Quantified	F	Actual
voltage_solarLoad	12.77 volts	Detected and Quantified	F	Actual

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 10/29/2007 12:15 PM EDT
Visit Comment: 100% surface flow

Activity: 071029121501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071029121502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.40 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.39 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.41 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.80 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	13.22 volts	Detected and Quantified	F	Actual								

Activity: 071029121503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.19	Detected and Quantified	F	Actual				10/31/2007				

Dilution: N *Recovery:* N *Correction:* N

ANC_Metrohm_Grab	51.51141 µeq/L	Detected and Quantified	F	Actual			10/31/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	19.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	10/31/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	39.02963 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	62.93091 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	23.69694 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	49.58671 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	98.25788 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	1.41215 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	80.10717 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.21602 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	175.25069 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	155.24675 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.88586	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 071029121504 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
DOC_PHN_8K_UVA_Grab	*Not Reported	*Not Reported	P	Actual								

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 11/6/2007 12:15 PM EST
Visit Comment: 75% surface flow

Activity: 071106121501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	INTERSTITIAL	Detected and Quantified	F	Actual								

Activity: 071106121502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.25 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.25 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.26 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.72 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	14.23 volts	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

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Activity: 071106121503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Couldn't get full sample

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.3718	Detected and Quantified	F	Actual				11/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	63.33805 µeq/L	Detected and Quantified	F	Actual				11/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	41.27381 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	66.4126 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	24.47283 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	50.93115 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	96.4669 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	86.17066 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	22.61993 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	183.09689 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	172.16914 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.94032	Detected and Quantified	F	Actual				4/23/2008				

Dilution: N *Recovery:* N *Correction:* N

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 11/13/2007 12:10 PM EST
Visit Comment: 75% surface flow

Activity: 071113121001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071113121002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Adjusted chart time

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.28 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.27 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.28 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.77 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.94 volts	Detected and Quantified	F	Actual								

Activity: 071113121003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Couldn't get full sample

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4667	Detected and Quantified	F	Actual				11/16/2007				

Dilution: N *Recovery:* N *Correction:* N

ANC_Metrohm_Grab	73.06581 µeq/L	Detected and Quantified	F	Actual			11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	20.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	43.45725 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	4/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	67.88742 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	24.66276 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	53.44897 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	94.53988 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	85.87063 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.44617 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	189.4629 µeq/L	Detected and Quantified	F	Actual			12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	180.42311 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95229	Detected and Quantified	F	Actual			12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 11/19/2007 1:00 PM EST
Visit Comment: 60% surface flow

Activity: 071119130001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	INTERSTITIAL	Detected and Quantified	F	Actual								

Activity: 071119130002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	*Not Reported	*Not Reported	F	Actual								
WatLev_Chart	0.28 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.30 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.76 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	14.24 volts	Detected and Quantified	F	Actual								

Activity: 071119130003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Walked 50 yards upstream to get sample

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2971	Detected and Quantified	F	Actual				11/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	66.91552 µeq/L	Detected and Quantified	F	Actual				11/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	20.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	43.40212 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	69.89521 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	24.20617 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	48.0419 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	94.92522 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	83.57554 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	20.40554 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	185.5519 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	170.9371 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.92124	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 11/26/2007 12:20 PM EST

Visit Comment: ~60% surface flow

Activity: 071126122001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	8.5 °C	Detected and Quantified	F	Actual								

weather	5	Detected and Quantified	F	Actual
water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	LOW	Detected and Quantified	F	Actual

Activity: 071126122002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.23 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.23 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.25 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.74 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.90 volts	Detected and Quantified	F	Actual								

Activity: 071126122003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Took sample 50 yards upstream

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2275	Detected and Quantified	F	Actual				11/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	79.18595 µeq/L	Detected and Quantified	F	Actual				11/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	20 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	44.8475 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	72.4144 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	24.1483 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	50.13791 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	93.19138 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	84.32891 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	20.55671 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	191.55461 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	184.11207 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96115	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 12/4/2007 12:55 PM EST

Visit Comment: ~50% surface flow

Activity: 071204125501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	2.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	INTERSTITIAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071204125502 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.28 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.27 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.29 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.73 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	14.36 volts	Detected and Quantified	F	Actual								

Activity: 071204125503 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Took sample 50 yards upstream

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.3465	Detected and Quantified	F	Actual				12/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	64.88466 µeq/L	Detected and Quantified	F	Actual				12/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	20 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		12/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	41.85394 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	69.70889 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	23.79348 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	46.64107 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	97.62345 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.35398 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	86.2373 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	20.59141 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	182.35136 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	171.75387 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.94188	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 12/11/2007 11:30 AM EST
Visit Comment: ~75% surface flow

Activity: 071211113001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	INTERSTITIAL	Detected and Quantified	F	Actual								

Activity: 071211113002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.27 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.27 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.28 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	*Not Reported	*Not Reported	F	Actual								

voltage_solarLoad	13.40 volts	Detected and Quantified	F	Actual

Activity: 071211113003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No
Activity Comment: Took sample ~50 yards upstream

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.1487	Detected and Quantified	F	Actual				12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	78.24117 µeq/L	Detected and Quantified	F	Actual				12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	20.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	44.67511 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	69.81881 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	24.14489 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	50.00185 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	95.81141 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	4.03865 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	86.58705 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	20.66466 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	192.67931 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	185.53338 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.96291	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 12/17/2007 12:20 PM EST

Activity: 071217122001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071217122002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.66 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.65 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.68 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.72 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.86 volts	Detected and Quantified	F	Actual								

Activity: 071217122003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0927	Detected and Quantified	F	Actual				12/19/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	43.11434 µeq/L	Detected and Quantified	F	Actual			12/19/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	18.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	12/19/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	37.79604 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
Mg_Ions_Grab	60.88478 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
Na_Ions_Grab	22.27675 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
K_Ions_Grab	43.16639 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SiO2_TC_Grab	85.02677 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
NO3_Ions_Grab	5.99349 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	84.2087 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
Cl_Ions_Grab	20.93197 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SBC_IC2_GRAB	164.13046 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	154.2485 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

IONRATIO_MET_IC2_GRAB	0.93979	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: SWAS **Station ID:** WOR1 **Visit Date:** 12/26/2007 11:20 AM EST

Activity: 071226112001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	5.0 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071226112002 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
WatLev_Staff	0.45 ft	Detected and Quantified	F	Actual								
WatLev_Chart	0.43 ft	Detected and Quantified	F	Actual								
WatLev_AXSYS	0.45 ft	Detected and Quantified	F	Actual								
voltage_StevensClock	8.70 volts	Detected and Quantified	F	Actual								
voltage_solarLoad	12.90 volts	Detected and Quantified	F	Actual								

Activity: 071226112003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Zachary Lucy **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.1297	Detected and Quantified	F	Actual				1/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	45.05239 µeq/L	Detected and Quantified	F	Actual				1/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	18.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	1/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: estimated 1/8/08							
Ca_Ions_Grab	37.88399 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	4/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
Mg_Ions_Grab	60.77371 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
Na_Ions_Grab	22.9738 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
K_Ions_Grab	41.67718 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SiO2_TC_Grab	84.642 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
NO3_Ions_Grab	3.58011 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	4/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SO4_Ions_Grab	87.60137 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
Cl_Ions_Grab	20.50859 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SBC_IC2_GRAB	163.31518 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	156.74246 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

IONRATIO_MET_IC2_GRAB	0.95975	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** M002 **Visit Date:** 4/24/2007 11:00 AM EDT

Activity: 070424110001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
days_since_precip	0 days	Detected and Quantified	F	Actual								

Activity: 070424110002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	4.7762	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-15.65859 µeq/L	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	15.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	17.82988 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	16.70002 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	8.62936 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_Grab	4.66288 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	41.34759 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.5979 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	58.25616 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	11.06928 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	119.40801 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/17/2007
Dilution: Y	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
O_AL_TC_Grab	28.85771 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	47.82864 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	54.26475 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	1.13457	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** M002 **Visit Date:** 7/25/2007 12:45 PM EDT
Visit Comment: Heavy rain, lightning

Activity: 070725124501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								

weather	6	Detected and Quantified	F	Actual
water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	NORMAL	Detected and Quantified	F	Actual
general_observation		Detected and Quantified	F	Actual

Activity: 070725124502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	4.7149	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-13.14438 µeq/L	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	38.47992 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	26.68898 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	9.05306 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	8.4135 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	51.74005 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	90.86665 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	11.80489 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

T_AL_TC_Grab	170.20561 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	8/21/2007
Dilution: Y	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
O_AL_TC_Grab	84.28501 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	8/22/2007
Dilution: Y	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	82.64196 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	89.56766 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	1.0838	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** M002 **Visit Date:** 10/30/2007 1:00 PM EDT

Visit Comment: Sample site is now a beaver pond

Activity: 071030130001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	8.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071030130002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.2017	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	8.14473 µeq/L	Detected and Quantified	F	Actual			11/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	25.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	11/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	99.9104 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	51.66569 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	14.64777 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	22.33575 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	57.9905 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.52392 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	157.36052 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.38431 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	61.5013 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	9/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
O_AL_TC_Grab	50.55336 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	11/5/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	188.56611 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	188.41348 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

IONRATIO_MET_IC2_GRAB	0.99919	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** M003 **Visit Date:** 4/24/2007 11:35 AM EDT
Visit Comment: Lake is limed every 2 years with 150 ton of lime

Activity: 070424113501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	0 days	Detected and Quantified	F	Actual								

Activity: 070424113502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5992	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	76.28706 µeq/L	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	86.30443 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	66.60739 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	8.9809 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_Grab	5.62517 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	20.87657 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	66.76528 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	11.44783 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	167.52439 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	154.54067 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9225	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** M003 **Visit Date:** 7/25/2007 12:00 PM EDT

Activity: 070725120001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.0 °C	Detected and Quantified	F	Actual								
weather	6	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

NPSTORET Results with Comments

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Activity: 070725120002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5258	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	173.91933 µeq/L	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	22.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	134.83634 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	93.80732 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	9.47823 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.685 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	23.79794 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.36678 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	55.33449 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	11.93664 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	245.17367 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	241.23096 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.98392	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** M003 **Visit Date:** 10/26/2007 1:45 PM EDT
Visit Comment: Dam shut off

Activity: 071026134501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071026134502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8906	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	255.24645 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	31.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	231.99345 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	90.95511 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	10.7344 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_Grab	6.22877 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	28.58211 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	56.12627 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	12.21483 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	339.91823 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	323.62805 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95208	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** M004 **Visit Date:** 4/24/2007 12:15 PM EDT

Activity: 070424121501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10.0 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	0 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070424121502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7674	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	32.43626 µeq/L	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	91.86334 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	22.36165 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	29.43283 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.29514 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	73.59703 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	82.93255 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	13.83733 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
T_AL_TC_Grab	76.52069 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/17/2007				
Dilution: Y	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												

O_AL_TC_Grab	81.5898 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/23/2007
Dilution: Y	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	149.95946 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	129.24664 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.86188	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** M004 **Visit Date:** 7/25/2007 2:00 PM EDT
Visit Comment: Heavy rain, lightning

Activity: 070725140001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	6	Detected and Quantified	F	Actual								
water_turbidity	MILD	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070725140002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.8425	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	54.0288 µeq/L	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	28.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	7/31/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	218.36105 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	45.96121 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	27.43633 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	10.05557 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	71.67304 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.98222 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	2.68118 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	135.0524 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	17.66549 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	246.87766 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	8/21/2007
Dilution: Y	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
O_AL_TC_Grab	313.91104 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	8/22/2007
Dilution: Y	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	302.79638 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	209.42787 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.69165	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** M004 **Visit Date:** 10/26/2007 2:30 PM EDT

Activity: 071026143001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.7 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071026143002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2198	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	71.71608 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	31.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	226.88375 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	48.31212 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	41.14268 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	17.2673 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	93.22866 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.60341 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	148.79312 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	41.61941 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	333.61235 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	262.73202 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.78754	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT01 **Visit Date:** 1/30/2007 12:16 PM EST

Visit Comment: TOM BLEVINS
//
Cold, lows near zero (F), approx. 2" snow on Sunday. //Cloudy, flurries, - 3 C.

Activity: 070130121601 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7436	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	74.83355 µeq/L	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	81.30944 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	34.0939 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	55.05724 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	8.10557 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	133.995 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	48.28726 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	28.59329 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	12.08301 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	178.57265 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	163.79711 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.91726	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07013012160F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	2 °C	Detected and Quantified	F	Actual				1/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT01 **Visit Date:** 4/30/2007 11:47 AM EDT

Activity: 070430114701 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tom Blevins **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	2 days	Detected and Quantified	F	Actual								

Activity: 070430114702 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tom Blevins **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8216	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	81.73458 µeq/L	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	81.11541 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	32.7503 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	55.50666 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	9.53328 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	130.55437 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	27.32244 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	23.08246 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	12.15722 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	178.91215 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	144.2967 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.80652	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT01 **Visit Date:** 7/30/2007 12:25 PM EDT

Activity: 070730122501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Bill Goetzinger **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070730122502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Bill Goetzinger **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8283	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	79.29724 µeq/L	Detected and Quantified	F	Actual			8/2/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	19.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	8/2/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	96.79077 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	36.68076 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	56.1264 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	9.89243 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	138.77189 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	4.51925 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	51.87777 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	40.96022 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	12.09719 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	204.00961 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	184.23242 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.90306	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT01 **Visit Date:** 10/29/2007 1:35 PM EDT

Activity: 071029133501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tom Blevins **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071029133502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tom Blevins **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7323	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	93.0833 µeq/L	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	20.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	97.00059 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	41.81772 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	60.74718 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	11.97808 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	144.34714 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NO3_Ions_Grab	42.0206 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	38.12681 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	14.00925 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	211.55007 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	187.23996 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.88509	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT02 **Visit Date:** 1/30/2007 10:51 AM EST

Visit Comment: TOM BLEVINS
// //Flurries, - 3 C air temp.
Cold, lows near zero (F), approx. 2" snow on Sunday.

Activity: 070130105101 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4159	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	25.95878 µeq/L	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	48.52836 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	24.22381 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	45.98625 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	9.97967 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	118.773 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	40.21068 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	46.49207 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	11.82218 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	128.72459 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	124.48371 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96705	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07013010510F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	2 °C	Detected and Quantified	F	Actual				1/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

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Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT02 **Visit Date:** 4/30/2007 12:57 PM EDT

Activity: 070430125701 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tom Blevins **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	2 days	Detected and Quantified	F	Actual								

Activity: 070430125702 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tom Blevins **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.3753	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	25.16601 µeq/L	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	47.88732 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	23.22348 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	45.76309 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	12.14805 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	119.70654 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	32.43035 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	48.52354 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	11.89152 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	129.02844 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	118.01142 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.91462	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT02 **Visit Date:** 7/30/2007 11:05 AM EDT

Activity: 070730110501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Bill Goetzinger **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070730110502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Bill Goetzinger **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4518	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	38.28934 µeq/L	Detected and Quantified	F	Actual			8/2/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	14.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	8/2/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	50.58409 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	23.84336 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	48.16 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	11.49437 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	133.34849 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	2.25358 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	17.36493 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	54.83143 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	11.32376 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	136.3354 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	121.80946 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.89345	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT02 **Visit Date:** 10/29/2007 2:52 PM EDT
Visit Comment: Creek is very low due to extreme drought this summer.

Activity: 071029145201 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tom Blevins **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071029145202 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tom Blevins **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.3567	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	30.14412 µeq/L	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	14.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	47.09463 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	23.15064 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	49.58006 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	13.04707 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	132.27265 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NO3_Ions_Grab	16.15342 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	64.90936 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	15.55152 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	132.8789 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	126.75842 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.95394	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT03 **Visit Date:** 1/30/2007 11:11 AM EST

Visit Comment: TOM BLEVINS
// //Flurries, - 3 C.
Cold, lows near zero (F), approx. 2" snow on Sunday.

Activity: 070130111101 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6072	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	53.58546 µeq/L	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	12.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										

Ca_Ions_Grab	31.47181 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	32.02507 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	28.22204 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	12.6239 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	106.057 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	2.23329 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	28.32116 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	9.82898 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	104.34932 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	93.96889 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.90052	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07013011110F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	2 °C	Detected and Quantified	F	Actual				1/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT03 **Visit Date:** 4/30/2007 1:22 PM EDT

Activity: 070430132201 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tom Blevins **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	2 days	Detected and Quantified	F	Actual								

Activity: 070430132202 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tom Blevins **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7573	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	62.7119 µeq/L	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	12.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	33.4747 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	33.22525 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	29.59047 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	17.00818 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	106.54726 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	30.1666 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	10.06224 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	113.3051 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	102.98124 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.90888	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT03 **Visit Date:** 7/30/2007 11:25 AM EDT

Activity: 070730112501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Bill Goetzinger **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	*Not Reported	*Not Reported	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070730112502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Bill Goetzinger **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6243	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	84.95962 µeq/L	Detected and Quantified	F	Actual			8/2/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	45.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	8/2/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	66.27956 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	49.07127 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	316.93607 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/24/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
K_Ions_Grab	18.99581 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	132.76149 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.66962 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	6.79378 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	38.81681 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	297.30914 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/24/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	451.95233 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	427.87935 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94674	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT03 **Visit Date:** 10/29/2007 2:36 PM EDT
Visit Comment: Creek is very low due to extreme drought this summer.

Activity: 071029143601 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tom Blevins **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	6.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071029143602 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tom Blevins **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7299	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	95.45129 µeq/L	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	15 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	49.20221 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	47.14246 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	41.99115 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	19.41921 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	130.88811 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	34.70166 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	13.22741 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	157.76153 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	143.42086 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9091	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT04 **Visit Date:** 1/30/2007

Visit Comment: TOM BLEVINS //Note: Insect hatch occurring. //Cloudy, flurries, - 3 C.
Cold, lows near zero (F), approx. 2" snow on Sunday.

Activity: 070130999901 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.3438	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	27.63162 µeq/L	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	12.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										

Ca_Ions_Grab	20.84719 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	15.40921 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	53.439 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	8.26738 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	129.762 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	2.42094 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	46.88541 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	10.59539 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	97.96928 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	87.53336 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.89348	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07013099990F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	2 °C	Detected and Quantified	F	Actual				1/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT04 **Visit Date:** 4/30/2007 10:37 AM EDT

Activity: 070430103701 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tom Blevins **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	2 days	Detected and Quantified	F	Actual								

Activity: 070430103702 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tom Blevins **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4728	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	33.9254 µeq/L	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	12.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	21.6912 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	15.26242 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	55.56458 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.87966 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	134.50919 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.94671 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	47.61129 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	10.41388 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	103.40436 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	92.89728 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.89839	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT04 **Visit Date:** 7/30/2007 1:50 PM EDT

Activity: 070730135001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Bill Goetzinger **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070730135003 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Bill Goetzinger **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9125	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	108.30153 µeq/L	Detected and Quantified	F	Actual			8/2/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	17.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	11/21/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	48.36922 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	68.11531 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	36.67803 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	23.72104 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	123.10707 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.76514 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	42.96362 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	12.15874 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	176.8901 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	164.18903 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9282	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT04 **Visit Date:** 10/29/2007 12:16 PM EDT
Visit Comment: Stream very low due to extreme drought this summer.

Activity: 071029121601 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tom Blevins **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	6.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071029121602 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tom Blevins **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4322	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	39.19854 µeq/L	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	13 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	27.25009 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	19.89518 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	64.91454 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	12.44461 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	151.98991 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	55.04637 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	18.37239 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	124.51092 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	112.6578 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.9048	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT05 **Visit Date:** 1/30/2007 10:12 AM EST

Visit Comment: TOM BLEVINS
// //Cloudy, flurries, - 3 C.
Cold, lows near zero (F), approx. 2" snow on Sunday.

Activity: 070130101201 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5429	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	42.10656 µeq/L	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	12.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										

Ca_Ions_Grab	20.1123 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	34.97006 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	28.49118 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	16.5363 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	99.783 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	43.32061 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	11.52964 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	100.11634 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	96.99731 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96885	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07013010120F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	1.5 °C	Detected and Quantified	F	Actual				1/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT05 **Visit Date:** 4/30/2007 1:56 PM EDT

Activity: 070430135601 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tom Blevins **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	2 days	Detected and Quantified	F	Actual								

Activity: 070430135602 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tom Blevins **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6692	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	51.15015 µeq/L	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	12.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	21.36131 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	35.79502 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	28.68377 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	20.7708 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	101.06587 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	40.38853 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	11.78872 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	106.6174 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	103.3679 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96952	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT05 **Visit Date:** 7/30/2007 3:55 PM EDT

Activity: 070730155501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Bill Goetzinger **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070730155502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Bill Goetzinger **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.51	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	41.36037 µeq/L	Detected and Quantified	F	Actual			8/2/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	11.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	8/2/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	37.81126 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	17.61291 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	51.5703 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	11.10786 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	136.86782 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	49.32761 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	10.08874 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	118.10883 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	100.81722 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.8536	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT05 **Visit Date:** 10/29/2007 3:26 PM EDT
Visit Comment: Stream is very low due to extreme drought this summer.

Activity: 071029152601 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tom Blevins **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071029152602 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tom Blevins **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.942	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	164.59341 µeq/L	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	24.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	79.09745 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	107.80646 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	49.31399 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	32.50718 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	126.54064 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	68.42665 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	15.80065 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	268.73158 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	248.86121 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.92606	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT06 **Visit Date:** 1/30/2007 9:33 AM EST

Visit Comment: TOM BLEVINS
// //Clear, cold - 3 C.
Cold, lows near zero, approx. 2" snow on Sunday.

Activity: 070130093301 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5674	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	39.45337 µeq/L	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	15.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										

Ca_Ions_Grab	38.63329 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	49.29102 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	26.43391 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	12.01625 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	84.693 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	14.72657 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	55.56668 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	11.07195 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	126.38097 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	120.81857 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95599	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070130093301 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4657	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	39.68738 µeq/L	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	15.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	2/2/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_Grab	38.36612 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	48.92963 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	26.38554 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	11.96376 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	84.295 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	10.80237 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	52.51189 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	11.08734 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	125.65155 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	114.08898 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.90798	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07013009330F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	2 °C	Detected and Quantified	F	Actual				1/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT06 **Visit Date:** 4/30/2007 9:18 AM EDT

Activity: 070430091801 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tom Blevins **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	2 days	Detected and Quantified	F	Actual								

Activity: 070430091802 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tom Blevins **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5598	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	49.21457 µeq/L	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	41.31222 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	50.82382 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	27.50442 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	14.85099 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	84.10212 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	3.51461 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	53.59818 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	11.1264 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	134.49795 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	117.45376 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.87328	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT06 **Visit Date:** 7/30/2007 3:11 PM EDT

Visit Comment: Moderate to heavy showers everyday for preceeding week to 10 days.

Activity: 070730151101 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tom Blevins **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	ABOVE NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

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Activity: 070730151102 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tom Blevins **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6115	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	59.89962 µeq/L	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	15.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	47.79746 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	56.27581 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	29.96132 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	16.01325 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	94.55368 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	10.60677 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	56.95536 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	11.32933 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	150.05434 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	138.79108 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.92494	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT06 **Visit Date:** 10/29/2007 10:55 AM EDT
Visit Comment: Stream very low due to extreme drought this summer.

Activity: 071029105501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tom Blevins **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	6.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071029105502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tom Blevins **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6398	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	85.42946 µeq/L	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	54.68226 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	64.11113 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	38.34672 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_Grab	17.8631 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SiO2_TC_Grab	102.51052 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	64.93782 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	13.73096 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	175.00971 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	164.13874 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.93788	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 071029105502 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Tom Blevins **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6915	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	85.39542 µeq/L	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	52.69916 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	64.36873 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	38.32934 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	17.82397 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	102.51052 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	65.00314 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	13.74965 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	173.2277 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	164.18871 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94782	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT07 **Visit Date:** 1/29/2007 2:05 PM EST
Visit Comment: E.A. LAMENT
// //Sunny and cold, high 24 F.
Some clouds, windy & cold, snow showers, 1-3" @ sites, highs 30-45, lows 9-30.

Activity: 070129140501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No
Activity Comment: No organic monomeric Al-bottle accidentally dumped after total was run

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.1817	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-3.55673 µeq/L	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	57.15677 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	30.09995 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	18.11309 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.47399 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	59.71 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	13.60759 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	77.28715 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cl_Ions_Grab	13.02853 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N						
T_AL_TC_Grab	72.765 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/11/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	111.8503 µeq/L	Detected and Quantified	F	Actual				2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	100.36654 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.89733	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 07012914050F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	0 °C	Detected and Quantified	F	Actual				1/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT07 **Visit Date:** 4/30/2007 3:00 PM EDT

Activity: 070430150001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Elizabeth Lament **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
days_since_precip	2 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

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Activity: 070430150002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Elizabeth Lament **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.0397	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-5.11038 µeq/L	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	52.70035 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	26.48345 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	16.25683 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.12798 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	51.63457 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	72.85489 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	12.18124 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
T_AL_TC_Grab	91.55673 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/12/2007				
Dilution: Y	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												

O_AL_TC_Grab	57.3736 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/18/2007
Dilution: Y	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	102.57511 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	79.96625 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.77959	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT07 **Visit Date:** 7/26/2007 11:00 AM EDT

Activity: 070726110001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** George T Annis **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	MILD	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070726110002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** George T Annis **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	4.8412	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-5.12681 µeq/L	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	20.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	82.67371 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	33.79356 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	14.64364 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	7.86993 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	50.70636 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.82834 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	113.45199 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	14.40971 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	184.11285 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	8/21/2007
Dilution: Y	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
O_AL_TC_Grab	91.74805 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	8/22/2007
Dilution: Y	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	138.98734 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	123.56323 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.88903	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT07 **Visit Date:** 10/29/2007 1:10 PM EDT

Activity: 071029131001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Elizabeth Lament **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071029131002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Elizabeth Lament **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	4.8947	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-7.48536 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	28.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	105.38407 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	50.18595 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	24.53016 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	17.18292 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	64.80858 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.75136 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	177.48345 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	27.09342 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	132.23113 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	9/23/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
O_AL_TC_Grab	61.233 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	11/5/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	197.2896 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	197.84287 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	1.0028	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT08 **Visit Date:** 1/29/2007 2:20 PM EST

Visit Comment: E.A. LAMENT

// //Sunny and cold, high 24 F.

Some clouds, windy & cold, snow showers, 1-3" @ sites, highs 30-45, lows 9-30.

Activity: 070129142001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0716	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	13.33871 µeq/L	Detected and Quantified	F	Actual			2/2/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	16 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	2/2/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_Grab	65.58704 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	30.42328 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	16.35237 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	6.56192 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	58.565 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	9.96355 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	69.76445 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	13.16571 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	118.93111 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	106.23242 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.89323	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Activity: 070129142001 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0604	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	13.24959 µeq/L	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	65.67609 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L						
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	30.37486 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L						
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	16.26709 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L						
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.52913 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L						
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	58.747 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L						
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	4.23294 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L						
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	70.09131 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L						
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	13.04713 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L						
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	118.85367 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	100.62097 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.8466	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07012914200F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	0 °C	Detected and Quantified	F	Actual				1/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT08 **Visit Date:** 4/30/2007 3:20 PM EDT

Activity: 070430152001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Elizabeth Lament **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
days_since_precip	2 days	Detected and Quantified	F	Actual								

Activity: 070430152002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Elizabeth Lament **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.8053	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	9.9904 µeq/L	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	13.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	61.6573 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	27.39088 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	15.77887 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	7.66518 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	55.67211 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.18693 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	70.51752 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	13.09043 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	54.1915 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
O_AL_TC_Grab	48.59041 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/23/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	112.67916 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	93.63885 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.83102	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT08 **Visit Date:** 7/26/2007 11:30 AM EDT

Activity: 070726113001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** George T Annis **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	MILD	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070726113002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** George T Annis **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.2297	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	15.11145 µeq/L	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	20.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	108.31153 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	42.61674 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	17.47318 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.49129 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	66.75048 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	1.7446 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	105.11572 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	15.2161 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	287.75004 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	8/21/2007
Dilution: Y	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
O_AL_TC_Grab	130.55216 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	8/22/2007
Dilution: Y	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	175.89924 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	137.18787 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.77992	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT08 **Visit Date:** 10/29/2007 1:20 PM EDT

Activity: 071029132001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Elizabeth Lament **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	8.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071029132002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Elizabeth Lament **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.6251	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	17.78794 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	20.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	91.17789 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	44.55161 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	23.25452 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	14.4787 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	74.77047 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	0.70924 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	108.83528 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	24.97103 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
T_AL_TC_Grab	132.23113 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		9/23/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										

Detect/Quant Lim Description: set 12/17/07

O_AL_TC_Grab	98.97024 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		11/5/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Detect/Quant Lim Description: set 12/17/07								
SBC_IC2_GRAB	173.46922 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	152.30349 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.87799	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT09 **Visit Date:** 1/29/2007 3:00 PM EST

Visit Comment: E.A. LAMENT

// //Sunny and cold, high 24 F.

Some clouds, windy & cold, snow showers, 1-3" @ sites, highs 30-45, lows 9-30.

Activity: 070129150001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7814	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	8.10295 µeq/L	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	14.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	48.44498 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	32.14112 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	14.61304 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.93319 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	61.171 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	5.39033 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	67.0696 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	12.80703 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	23.803 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/11/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	102.13883 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	93.36991 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.91415	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07012915000F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	0 °C	Detected and Quantified	F	Actual				1/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT09 **Visit Date:** 4/30/2007 1:00 PM EDT

Activity: 070430130001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Elizabeth Lament **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13 °C	Detected and Quantified	F	Actual								

weather	0	Detected and Quantified	F	Actual
water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	LOW	Detected and Quantified	F	Actual
days_since_precip	2 days	Detected and Quantified	F	Actual

Activity: 070430130002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Elizabeth Lament **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7431	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	7.92806 µeq/L	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	12.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	46.89017 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	30.27967 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	14.16579 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	8.38582 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	57.40432 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	65.9885 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	12.65992 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

T_AL_TC_Grab	29.32464 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	99.72795 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	86.61698 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.86853	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT09 **Visit Date:** 7/26/2007 1:00 PM EDT

Activity: 070726130001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** George T Annis **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	MILD	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070726130002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** George T Annis **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.4866	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	14.29444 µeq/L	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	86.52978 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	40.82345 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	17.34982 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	9.63259 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	63.87917 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	1.93973 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	97.88086 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	13.33977 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	146.74219 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	8/21/2007
Dilution: Y	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
O_AL_TC_Grab	103.7817 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	8/22/2007
Dilution: Y	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	154.34214 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	127.4548 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.82579	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT09 **Visit Date:** 10/29/2007 2:25 PM EDT

Activity: 071029142501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Elizabeth Lament **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071029142502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Elizabeth Lament **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7235	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	27.35966 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	22.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	89.06699 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	56.3748 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	23.75003 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	19.34469 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	83.03037 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	132.88032 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	25.32695 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	20.31069 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	9/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	188.54301 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	185.60743 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.98443	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT10 **Visit Date:** 1/26/2007 1:30 PM EST

Visit Comment: KIRKPATRICK //Located next to 5 dumpsters, some garbage b/t dumpsters and stream. //Cloudy, cold, 27 F, patches of ice throughout stream, snow sleet approx. 0.5".
Cold, snow flurries all week, ice and sleet last Sunday.

Activity: 070126133001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2464	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	18.98974 µeq/L	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	12.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	2/6/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_Grab	34.38759 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	31.47782 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	20.80929 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	8.85903 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	65.587 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.9869 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	49.09028 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	27.24006 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	95.54023 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	96.30698 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	1.00803	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07012613300F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	0.5 °C	Detected and Quantified	F	Actual				1/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

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Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT10 **Visit Date:** 4/24/2007 9:05 AM EDT
Visit Comment: Lots of trash in dumpsters; more litter than usual around stream and some even in stream.

Activity: 070424090501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Lee Kirkpatrick **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	MILD	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	0 days	Detected and Quantified	F	Actual								

Activity: 070424090502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Lee Kirkpatrick **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0327	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	12.83878 µeq/L	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	10.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	24.87561 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	26.12503 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	16.00201 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	11.21953 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	62.74218 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	49.47509 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	14.80886 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	78.22868 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	77.16323 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.98638	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT10 **Visit Date:** 8/1/2007 9:25 AM EDT

Activity: 070801092501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Heather Luczak **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

NPSTORET Results with Comments

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Activity: 070801092502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Heather Luczak **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4023	Detected and Quantified	F	Actual				8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	46.40243 µeq/L	Detected and Quantified	F	Actual				8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	12.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	42.18006 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	35.4459 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	21.65132 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	11.78132 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	91.86359 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	2.30398 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	38.97944 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	15.3901 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	111.0651 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	103.07595 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.92807	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT10 **Visit Date:** 10/31/2007 12:25 PM EDT

Visit Comment: Lots of organic debris on cobble & gravel substrate at collection site, easily stirred up when walking or with any movement of water in the stream - noted while rinsing the bottle downstream from site and while measuring temp at site.

Activity: 071031122501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Terry Flaherty **QC Sample?:** No

Activity Comment: We had several inches of rain last week but Friday was the last day of precip. Shots heard from hunter on trail upstream from site. 5 trash dumpsters on road downstream from site.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	MILD	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071031122502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Terry Flaherty **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4656	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	48.59703 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	12.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	43.76788 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	34.57383 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	22.30484 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/14/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	14.61393 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/14/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	83.20133 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/14/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	4/14/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	45.80923 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/14/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	19.6601 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/14/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	115.26698 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	114.10686 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.98994	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT11 **Visit Date:** 1/31/2007 10:00 AM EST
Visit Comment: L. KIRKPATRICK
// //Sunny, cold, temp. 9 F.
Some snow & ice, temp. teen to low mid 30 F.

Activity: 070131100001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7375	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	19.78663 µeq/L	Detected and Quantified	F	Actual			2/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	11.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	2/6/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_Grab	30.73876 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	32.32938 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	12.40439 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	9.28788 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	72.243 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	7.1254 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	39.5331 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	14.05234 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	5.688 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/11/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	84.76691 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	80.49747 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94963	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07013110000F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	0 °C	Detected and Quantified	F	Actual				1/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT11 **Visit Date:** 3/8/2007 10:30 AM EST
Visit Comment: RICK WEBB
// //

Activity: 070308103001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.9565	Detected and Quantified	F	Actual				3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	12.2523 µeq/L	Detected and Quantified	F	Actual				3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	11.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	29.24695 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	29.97995 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	11.67729 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.40516 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	61.37 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	2.20961 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	40.30607 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	13.83433 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	8.004 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	81.31585 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	68.60231 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.84365	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT11 **Visit Date:** 4/24/2007 9:50 AM EDT

Visit Comment: No signs of camping in parking area. No signs of hiking. Some storm damage from winter storm in late Feb.

Activity: 070424095001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Lee Kirkpatrick **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10.5 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	MILD	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	0 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070424095002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Lee Kirkpatrick **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7813	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	14.15023 µeq/L	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	11.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	27.1799 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	28.16562 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	11.98604 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	11.20093 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	60.42148 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.18754 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	40.13933 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	14.01444 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
T_AL_TC_Grab	7.75352 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
SBC_IC2_GRAB	78.72003 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	68.3445 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.8682	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT11 **Visit Date:** 8/1/2007 12:10 PM EDT

Activity: 070801121001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Heather Luczak **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070801121002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Heather Luczak **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2885	Detected and Quantified	F	Actual				8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	35.5274 µeq/L	Detected and Quantified	F	Actual				8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	10 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	36.3423 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	34.44164 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	12.23474 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	10.92399 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	87.25619 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	3.83558 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	33.29661 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	12.436 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	93.94917 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	85.09559 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.90576	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT11 **Visit Date:** 10/31/2007 3:17 PM EDT

Visit Comment: There are a lot of newly fallen leaves and pine needles gathering at the cut log that's damming flow at the site. Collected sample in flowing water upstream from the debris. String box string in stream indicating someone has been here measuring channel length.

Activity: 071031151701 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Terry Flaherty **QC Sample?:** No

Activity Comment: We had several inches of rain last week. Last precip on Friday. Frost at night last 3 nights. Drought conditions persist. Smaller tribs are dry but main stream flow is up a little since the rain.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								

water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	NORMAL	Detected and Quantified	F	Actual
general_observation		Detected and Quantified	F	Actual

Activity: 071031151702 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Terry Flaherty **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.115	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	32.82501 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	10.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	32.69589 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	33.36479 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	12.18089 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	12.67939 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	80.41683 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	0.80052 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	39.21437 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	14.44101 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	90.92746 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	87.28091 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9599	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT12 **Visit Date:** 1/31/2007 10:10 AM EST

Visit Comment: L. KIRKPATRICK
//
week.
Some snow & ice, cold.
//Sunny, cold, 9 F, flurries all

Activity: 070131101001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.738	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	108.63456 µeq/L	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/6/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	87.18877 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	75.30709 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	12.84118 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.91852 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	63.412 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	10.13641 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	43.12996 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	15.37674 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	186.26206 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	177.27767 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95176	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07013110100F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	0 °C	Detected and Quantified	F	Actual				1/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT12 **Visit Date:** 3/8/2007 2:01 PM EST
Visit Comment: RICK WEBB
// //

Activity: 070308140101 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7736	Detected and Quantified	F	Actual				3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	78.98252 µeq/L	Detected and Quantified	F	Actual				3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	16.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	3/15/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_Grab	64.23405 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	58.79738 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	12.40639 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	12.37987 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	61.769 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	7.02861 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	43.34664 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	14.59042 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	147.82419 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	143.94819 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97378	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT12 **Visit Date:** 4/24/2007 9:55 AM EDT
Visit Comment: No signs of hiking/camping. No sign of humans. Some storm damage (tree tops in parking area) from winter storm in late Feb.

Activity: 070424095501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Lee Kirkpatrick **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10.5 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	MILD	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	0 days	Detected and Quantified	F	Actual								

Activity: 070424095502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Lee Kirkpatrick **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8161	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	95.7586 µeq/L	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	78.07888 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	67.67196 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	13.30066 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	14.5381 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	64.09679 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.98594 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	43.34409 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	14.59862 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	173.5961 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	154.68725 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.89108	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT12 **Visit Date:** 8/1/2007 12:15 PM EDT

Activity: 070801121501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Heather Luczak **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	19.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	MILD	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070801121502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Heather Luczak **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8295	Detected and Quantified	F	Actual				8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	203.0316 µeq/L	Detected and Quantified	F	Actual			8/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	25.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	8/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	142.67043 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	111.67292 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	13.57903 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	19.0067 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	75.56942 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	2.0162 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	10.43096 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	38.25911 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	13.90777 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	288.94528 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	265.62944 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.91931	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT12 **Visit Date:** 10/31/2007 3:24 PM EDT

Activity: 071031152401 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Terry Flaherty **QC Sample?:** No
Activity Comment: We had several inches of rain last week. Last precip on Friday. Frost at night last 3 nights. Drought conditions persist. Smaller tribs are dry but main stream flow is up a little since the rain.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071031152402 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Terry Flaherty **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8285	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	152.29186 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	21.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	104.93143 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	86.52351 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	12.91981 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	17.69486 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	67.87396 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	46.30252 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	17.97709 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	222.07611 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	216.61197 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9754	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT14 **Visit Date:** 1/31/2007 12:15 PM EST

Visit Comment: L. KIRKPATRICK //Camping and hiking near site, no visible signs of activity.
Snow & ice previous. //Cold, temp. 19 F.

Activity: 070131121501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0748	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	17.48372 µeq/L	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	10.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/6/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										

Ca_Ions_Grab	26.43271 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	29.88562 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	13.46357 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	8.95655 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	67.512 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	3.06561 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	42.24575 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	13.68988 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	78.74495 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	76.48496 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9713	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07013112150F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	0 °C	Detected and Quantified	F	Actual				1/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT14 **Visit Date:** 3/8/2007 4:17 PM EST
Visit Comment: RICK WEBB
// //

Activity: 070308161701 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0485	Detected and Quantified	F	Actual				3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	14.00173 µeq/L	Detected and Quantified	F	Actual				3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	10 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	23.38585 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	27.47791 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	12.88631 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.34279 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	62.333 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	45.5659 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	13.03058 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		9/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	74.09936 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	72.63871 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.98029	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT14 **Visit Date:** 4/24/2007 11:15 AM EDT

Visit Comment: No visible signs of hiking & camping

Activity: 070424111501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Lee Kirkpatrick **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11.5 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	MILD	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	0 days	Detected and Quantified	F	Actual								

Activity: 070424111502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Lee Kirkpatrick **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0892	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	14.973 µeq/L	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	10.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	24.28605 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
Mg_Ions_Grab	27.96271 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
Na_Ions_Grab	13.44126 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
K_Ions_Grab	11.66458 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SiO2_TC_Grab	56.55783 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/2007							
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SO4_Ions_Grab	44.85535 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
Cl_Ions_Grab	13.25105 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SBC_IC2_GRAB	77.3611 µeq/L	Detected and Quantified	F	Actual			12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	73.1199 µeq/L	Detected and Quantified	F	Actual			12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94518	Detected and Quantified	F	Actual			12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT14 **Visit Date:** 8/1/2007 10:55 AM EDT

Activity: 070801105501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Heather Luczak **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	19.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070801105502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Heather Luczak **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.3324	Detected and Quantified	F	Actual				8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	36.53904 µeq/L	Detected and Quantified	F	Actual				8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	10.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	36.66549 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	34.8848 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	14.7711 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	11.37438 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	96.09168 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NO3_Ions_Grab	1.74916 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	34.84586 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	13.34588 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	97.70227 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	86.47994 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.88514	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT14 **Visit Date:** 10/31/2007 2:23 PM EDT

Activity: 071031142301 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Terry Flaherty **QC Sample?:** No

Activity Comment: We had rain last week - last precip on Friday. Otherwise it has been dry. It has frosted the last 3 nights.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	MILD	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071031142302 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Terry Flaherty **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2326	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	27.14803 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	11.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	34.78777 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	34.87236 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	14.20353 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	12.47434 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	82.1573 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	48.80319 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	17.3991 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	96.3445 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	93.39082 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.96934	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT15 **Visit Date:** 1/31/2007 11:55 AM EST

Visit Comment: L. KIRKPATRICK //Site close to road with pull off near stream. Currently looks to have been used several times. No visible evidence of trash in stream or on road. //Sunny, cold, 19 F.
Some ice and snow previous week, temp in teens & low to mid 30's F for highs.

Activity: 070131115501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7305	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	15.55011 µeq/L	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	7.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/6/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	18.55305 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	13.84289 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	13.15604 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.47553 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	87.034 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	1.36545 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	19.69292 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	13.02734 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	15.465 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/11/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	52.03401 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	49.63582 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95391	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07013111550F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	0.5 °C	Detected and Quantified	F	Actual				1/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT15 **Visit Date:** 3/8/2007 4:33 PM EST
Visit Comment: RICK WEBB
// //

Activity: 070308163301 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.9777	Detected and Quantified	F	Actual				3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	14.81452 µeq/L	Detected and Quantified	F	Actual				3/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	7.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	3/15/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_Grab	18.15691 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	15.63318 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	13.18726 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	8.144 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	77.007 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	12/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	26.39183 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	12.77822 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	9/5/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	15.268 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	55.12785 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	54.02507 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.98	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT15 **Visit Date:** 4/24/2007 10:50 AM EDT

Activity: 070424105001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Lee Kirkpatrick **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11.5 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	MILD	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	0 days	Detected and Quantified	F	Actual								

Activity: 070424105002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Lee Kirkpatrick **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.9784	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	15.87503 µeq/L	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	7.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: estimated 1/8/08												
Ca_Ions_Grab	21.00812 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
Mg_Ions_Grab	16.20219 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												
Na_Ions_Grab	13.96285 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/18/07												

K_Ions_Grab	9.12008 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SiO2_TC_Grab	79.81822 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/2007							
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
SO4_Ions_Grab	23.0942 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
Cl_Ions_Grab	13.14661 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/18/07							
T_AL_TC_Grab	18.90867 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	60.29974 µeq/L	Detected and Quantified	F	Actual			12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	52.15634 µeq/L	Detected and Quantified	F	Actual			12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.86495	Detected and Quantified	F	Actual			12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT15 **Visit Date:** 8/1/2007 11:05 AM EDT

Activity: 070801110501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Heather Luczak **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	19.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070801110502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Heather Luczak **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.142	Detected and Quantified	F	Actual				8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	30.69349 µeq/L	Detected and Quantified	F	Actual				8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	7.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	31.00332 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	17.92217 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	12.78135 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.9802 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	108.22388 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	14.36135 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	13.03802 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	68.69354 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	58.13336 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.84627	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT15 **Visit Date:** 10/31/2007 12:48 PM EDT

Activity: 071031124801 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Terry Flaherty **QC Sample?:** No

Activity Comment: We had rain last week - last precip on Friday. Otherwise it has been dry. It has frosted the last 3 nights.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	MILD	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071031124802 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Terry Flaherty **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.002	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	22.02488 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	8.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	28.2947 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	19.3896 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	12.79919 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	8.98262 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	97.45005 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	0.79743 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	28.43217 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	15.12155 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
T_AL_TC_Grab	19.63535 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		9/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
SBC_IC2_GRAB	69.47261 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	66.37603 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.95543	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT16 **Visit Date:** 1/25/2007 10:40 AM EST
Visit Comment: BOYD ANDERSON
// //Cloudy and snow flurries.
1" of sleet on 1-21-07, highs in 30's, low 20's, cold.

Activity: 070125104001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.1566	Detected and Quantified	F	Actual				1/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	21.72868 µeq/L	Detected and Quantified	F	Actual				1/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	15.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/31/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	62.59736 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	36.24347 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	14.02249 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.77531 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	68.259 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	79.79801 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	17.43307 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	123.64513 µeq/L	Detected and Quantified	F	Actual				2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	119.00026 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.96243	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 07012510400F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	2.5 °C	Detected and Quantified	F	Actual				1/25/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT16 **Visit Date:** 4/27/2007 11:28 AM EDT

Activity: 070427112801 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Boyd Anderson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.5 °C	Detected and Quantified	F	Actual								
weather	6	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	0 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070427112802 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Boyd Anderson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.3194	Detected and Quantified	F	Actual				5/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	23.78739 µeq/L	Detected and Quantified	F	Actual				5/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	60.91222 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	34.52439 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	14.27632 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	13.53425 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	66.63592 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	80.32582 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	17.35176 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	123.25368 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	121.50547 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.98582	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT16 **Visit Date:** 7/25/2007 9:40 AM EDT

Activity: 070725094001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Boyd Anderson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.0 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070725094002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Boyd Anderson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.8455	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	27.49293 µeq/L	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	13.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	60.42732 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	33.62611 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	13.38085 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_Grab	10.43361 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	80.53302 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	69.43705 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	16.31497 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	5.57672 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	8/21/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	117.87439 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	113.28545 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96107	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT16 **Visit Date:** 10/25/2007 11:10 AM EDT

Visit Comment: Over 2" of rain in past 24 hours.

Activity: 071025111001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Boyd Anderson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	6	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

general_observation | Detected and Quantified | F | Actual

Activity: 071025111002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Boyd Anderson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2421	Detected and Quantified	F	Actual				11/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	28.66193 µeq/L	Detected and Quantified	F	Actual				11/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	12.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	52.94918 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	29.11888 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	11.80703 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	16.74601 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	80.51603 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	60.88851 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	16.76811 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	110.6276 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	106.35905 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.96142	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT18 **Visit Date:** 4/30/2007 10:05 AM EDT

Activity: 070430100501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Cliff Rexrode **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	3 days	Detected and Quantified	F	Actual								

Activity: 070430100502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Cliff Rexrode **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6781	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	51.41194 µeq/L	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	66.81799 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	55.41777 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	27.89895 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	15.94828 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	82.93599 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	4.14688 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	77.17561 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	11.81282 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	166.08949 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	144.54725 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.8703	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT18 **Visit Date:** 7/30/2007 1:00 PM EDT

Activity: 070730130001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Cliff Rexrode **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070730130002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Cliff Rexrode **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9769	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	132.80284 µeq/L	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	20.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	90.60215 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	73.80667 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	44.76911 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	21.41685 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	88.27022 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.56312 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	9.05602 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	57.59059 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	8.87991 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	231.1579 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	208.32936 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.90124	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 070730130002 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Cliff Rexrode **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.0126	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	132.65803 µeq/L	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	21.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	89.20076 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	73.63041 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	44.34274 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	21.21912 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	87.69476 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/9/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.35347 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	10.48995 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	57.9171 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	8.93084 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	228.7465 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	209.99592 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.91803	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT18 **Visit Date:** 10/28/2007 12:05 PM EDT
Visit Comment: At least 3 days of rain-Th, Fri, Sat. Storm system came out of south & southwest. Air temp. 7 degrees C.

Activity: 071028120501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Cliff Rexrode **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	8.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	ABOVE NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071028120502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Cliff Rexrode **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8638	Detected and Quantified	F	Actual				10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	96.86889 µeq/L	Detected and Quantified	F	Actual				10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	21.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	86.04936 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	72.23256 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	37.57255 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	24.11868 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	90.52842 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	83.83242 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	16.96814 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	219.97965 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	197.70995 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.89876	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT19 **Visit Date:** 4/30/2007 10:15 AM EDT

Activity: 070430101501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Cliff Rexrode **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	3 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070430101502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Cliff Rexrode **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5565	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	46.43622 µeq/L	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	21.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	70.82633 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	57.58436 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	27.60251 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	19.11186 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	82.74168 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.22154 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	25.62315 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	72.26787 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	14.52971 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	175.3466 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	158.85695 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.90596	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT19 **Visit Date:** 7/30/2007 1:15 PM EDT

Activity: 070730131501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Cliff Rexrode **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070730131502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Cliff Rexrode **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7933	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	85.00877 µeq/L	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	21.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	86.54038 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	69.94149 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	30.06179 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_Grab	23.22989 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	99.40825 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	1.135 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	31.26098 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	68.23545 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	11.69255 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	210.90855 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	196.19775 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93025	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT19 **Visit Date:** 10/28/2007 12:15 PM EDT

Visit Comment: Rain Th, Fri, Sat. Storm system came out of south & southwest. Air temp. 7 degrees C.

Activity: 071028121501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Cliff Rexrode **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	ABOVE NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071028121502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Cliff Rexrode **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7984	Detected and Quantified	F	Actual				10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	86.92624 µeq/L	Detected and Quantified	F	Actual				10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	20.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	79.81088 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	66.57154 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	27.56128 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	26.2251 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	90.33562 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	6.98154 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	72.92919 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	14.99796 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	200.1753 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	181.83493 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.90838	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT22 **Visit Date:** 1/29/2007 8:30 AM EST
Visit Comment: K. HICKMAN
// //Cold & clear.
Cold & clear, some partly cloudy days.

Activity: 070129083001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8359	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	88.97244 µeq/L	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	55.24832 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	43.27458 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	67.63899 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	8.41571 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	184.858 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	49.85728 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/29/2007			
Dilution: N	*Recovery:* N	*Correction:* N									
Cl_Ions_Grab	24.43119 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/29/2007			
Dilution: N	*Recovery:* N	*Correction:* N									
SBC_IC2_GRAB	174.5841 µeq/L	Detected and Quantified	F	Actual				2/6/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
SAA_MET_IC2_GRAB	163.30141 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.93537	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Activity: 07012908300F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	1.1 °C	Detected and Quantified	F	Actual				1/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT22 **Visit Date:** 5/1/2007 3:00 PM EDT

Activity: 070501150001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	5 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070501150002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7371	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	109.15965 µeq/L	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	60.87434 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	44.67424 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	75.39504 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	12.40395 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	186.61607 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	49.92401 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	23.47249 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	193.35407 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	182.59665 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.94436	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT22 **Visit Date:** 7/25/2007 1:00 PM EDT

Activity: 070725130001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Herbie Huffman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.0 °C	Detected and Quantified	F	Actual								
weather	8	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070725130002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6986	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	162.47481 µeq/L	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	22.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	87.31034 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	63.0876 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	86.8445 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_Grab	16.18044 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	209.58744 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	12.06136 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	39.93748 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.46749 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	253.42938 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	236.94114 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93494	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT22 **Visit Date:** 10/29/2007 12:15 PM EDT

Activity: 071029121501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Herbie Huffman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7.8 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071029121502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Herbie Huffman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7187	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	133.12594 µeq/L	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	22.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	82.50551 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	62.56476 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	83.21762 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	16.95666 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	196.5028 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.26396 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	55.2945 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	33.64162 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	245.50851 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	222.10256 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.90466	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT23 **Visit Date:** 1/29/2007 9:25 AM EST
Visit Comment: K. HICKMAN
// //Cold & clear.
Cold & clear, some partly cloudy days.

Activity: 070129092501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8872	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	97.05944 µeq/L	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	53.14089 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	35.84232 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	72.54239 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.56392 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	190.784 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		12/18/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	35.06971 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	28.82385 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	172.09602 µeq/L	Detected and Quantified	F	Actual				2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	160.9935 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.93549	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 07012909250F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	1.7 °C	Detected and Quantified	F	Actual				1/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT23 **Visit Date:** 5/1/2007 2:30 PM EDT

Activity: 070501143001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	5 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070501143002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7706	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	129.18508 µeq/L	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	63.77665 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	40.07895 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	82.3559 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	15.53716 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	199.59708 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	36.52328 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	28.42987 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	201.75516 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	194.17873 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.96245	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT23 **Visit Date:** 7/25/2007 2:20 PM EDT

Activity: 070725142001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Herbie Huffman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.0 °C	Detected and Quantified	F	Actual								
weather	8	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070725142002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Herbie Huffman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7212	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	201.33741 µeq/L	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	23.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	91.95163 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	56.59542 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	100.20117 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/24/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										

K_Ions_Grab	19.86418 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	230.70608 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.98425 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.87319 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	28.29937 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	27.05378 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	269.59665 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	257.56375 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95537	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT23 **Visit Date:** 10/29/2007 11:30 AM EDT

Activity: 071029113001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Herbie Huffman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	8.9 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071029113002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Herbie Huffman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7469	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	164.58974 µeq/L	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	24.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	92.46953 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	58.84057 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	98.04039 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/11/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	21.31896 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	217.13814 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	47.97354 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	37.66887 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	270.67595 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	250.27265 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.92462	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT24 **Visit Date:** 1/29/2007 2:30 PM EST
Visit Comment: TRACY CALDWELL
// //Sunny, 28F
Cold, windy, snow showers

Activity: 070129143001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2506	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	23.49673 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	13.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	50.18615 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	27.44988 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	14.54536 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	8.26263 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	81.954 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	59.21424 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	15.76246 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	100.45052 µeq/L	Detected and Quantified	F	Actual				2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	98.51393 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.98072	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 07012914300F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	1 °C	Detected and Quantified	F	Actual				1/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT24 **Visit Date:** 4/26/2007 2:30 PM EDT

Activity: 070426143001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tracy Caldwell VanDyke **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	7 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070426143002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tracy Caldwell VanDyke **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0918	Detected and Quantified	F	Actual				5/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	15.9705 µeq/L	Detected and Quantified	F	Actual				5/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	12.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	42.68463 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	25.75699 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	14.70292 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	11.42591 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	79.82139 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	58.76009 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	16.6366 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	94.57695 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	91.40769 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.96649	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT24 **Visit Date:** 7/27/2007 1:15 PM EDT

Activity: 070727131501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tracy Caldwell VanDyke **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070727131502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tracy Caldwell VanDyke **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5853	Detected and Quantified	F	Actual				8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	52.02882 µeq/L	Detected and Quantified	F	Actual				8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	13.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	78.11016 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	30.07128 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	13.6657 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_Grab	9.07326 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	107.8177 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	57.97092 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	12.65296 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	130.9269 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	122.6932 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93711	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT24 **Visit Date:** 10/31/2007 10:15 AM EDT

Activity: 071031101501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tracy Caldwell VanDyke **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071031101502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tracy Caldwell VanDyke **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.456	Detected and Quantified	F	Actual				11/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	43.46704 µeq/L	Detected and Quantified	F	Actual				11/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	13.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	73.99686 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	27.40886 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	13.13528 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	9.63802 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	103.32484 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	65.38312 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	14.88517 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	124.18552 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	123.77583 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.9967	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT25 **Visit Date:** 1/29/2007 1:30 PM EST
Visit Comment: TRACY CALDWELL
//
Cold, windy, snow showers //Sunny, 28F

Activity: 070129133001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.8098	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	6.08359 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	10.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	21.9109 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	25.90248 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	12.73185 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.29283 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	67.828 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	42.58549 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	15.5949 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	11.75 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/11/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	66.84456 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	64.30448 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.962	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07012913300F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	0 °C	Detected and Quantified	F	Actual				1/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT25 **Visit Date:** 4/26/2007 1:00 PM EDT

Activity: 070426130001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tracy Caldwell VanDyke **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	7 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070426130002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tracy Caldwell VanDyke **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.626	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	2.62772 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	9.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/8/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	20.4257 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	23.59025 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	12.56711 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.46992 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	60.06168 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	42.47855 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	15.27308 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
T_AL_TC_Grab	13.43745 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
SBC_IC2_GRAB	64.05948 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	60.41985 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.94318	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT25 **Visit Date:** 7/27/2007 2:00 PM EDT

Activity: 070727140001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tracy Caldwell VanDyke **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070727140002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tracy Caldwell VanDyke **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.8509	Detected and Quantified	F	Actual				8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	10.76283 µeq/L	Detected and Quantified	F	Actual				8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	8.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	26.00916 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	26.36218 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	12.48541 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_Grab	7.22306 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	83.84304 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	39.85527 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	13.0515 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	20.46921 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	8/21/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	72.08631 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	63.7101 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.8838	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT25 **Visit Date:** 10/31/2007 9:40 AM EDT

Activity: 071031094001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Tracy Caldwell VanDyke **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	8.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

general_observation | Detected and Quantified | F | Actual

Activity: 071031094002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Tracy Caldwell VanDyke **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.8318	Detected and Quantified	F	Actual				11/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	10.82876 µeq/L	Detected and Quantified	F	Actual				11/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	9.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/9/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	25.21675 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	27.00367 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	12.55862 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.29153 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	85.73393 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	43.42871 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	17.97405 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
T_AL_TC_Grab	18.78353 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		9/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Detect/Quant Lim Description: set 12/17/07

SBC_IC2_GRAB	75.07707 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	72.27202 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96264	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT26 **Visit Date:** 1/26/2007 3:10 PM EST

Visit Comment: E.A. LAMENT
// //Partly cloudy, windy, high 40 F.
Sun, clouds, wind, snow flurries & showers, 1/2 - 1" @ sites, highs 30-43, lows 20-33.

Activity: 070126151001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.2122	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-3.819 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	47.11073 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	35.8074 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	12.42602 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	8.8951 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	67.081 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N						
NO3_Ions_Grab	1.75564 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	85.62924 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	19.64702 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N						
T_AL_TC_Grab	40.475 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/11/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	104.24575 µeq/L	Detected and Quantified	F	Actual				2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	103.2129 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.99009	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 07012615100F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	2 °C	Detected and Quantified	F	Actual				1/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT26 **Visit Date:** 4/30/2007 1:15 PM EDT

Activity: 070430131501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** George T Annis **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								

flow_streamStage	NORMAL	Detected and Quantified	F	Actual
days_since_precip	3 days	Detected and Quantified	F	Actual

Activity: 070430131502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** George T Annis **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.1265	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-5.6617 µeq/L	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	48.03436 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	34.40786 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	12.42211 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	11.3984 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	64.1511 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.18737 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	89.71238 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	20.08632 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

T_AL_TC_Grab	44.08493 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	106.4501 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	104.1775 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97865	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT26 **Visit Date:** 7/25/2007 12:30 PM EDT

Activity: 070725123001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** George T Annis **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	MILD	Detected and Quantified	F	Actual								
flow_streamStage	ABOVE NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070725123002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** George T Annis **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.0011	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-4.66962 µeq/L	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	53.83091 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	40.12987 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	13.8201 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	9.50394 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	75.52193 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	3.53274 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	97.40085 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	19.79782 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	63.99645 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	8/21/2007
Dilution: Y	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
O_AL_TC_Grab	22.81063 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	8/22/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	117.29132 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	116.06179 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.98952	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT26 **Visit Date:** 10/31/2007 12:40 PM EDT

Activity: 071031124001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Elizabeth Lament **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071031124002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Elizabeth Lament **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.1308	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-3.11123 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	47.95419 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	35.62414 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	14.17237 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.98329 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	80.47625 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/14/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	4/14/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	84.70326 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/14/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	26.18434 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/14/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	48.78536 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	9/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	104.74049 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	107.81687 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	1.02937	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT28 **Visit Date:** 1/26/2007 2:30 PM EST

Visit Comment: E.A. LAMENT

// //Partly cloudy, windy, high 40 F.

Sun, clouds, wind, snow flurries & showers, 1/2 - 1" @ sites, highs 30-43, lows 20-33.

Activity: 070126143001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.6334	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	2.90461 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	9.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										

Ca_Ions_Grab	20.75178 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	24.60053 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	10.67337 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	6.20979 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	71.197 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	42.38549 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	13.51942 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	20.572 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/11/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	62.24197 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	58.85002 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9455	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07012614300F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	2 °C	Detected and Quantified	F	Actual				1/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT28 **Visit Date:** 4/30/2007 10:20 AM EDT

Activity: 070430102001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** George T Annis **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	3 days	Detected and Quantified	F	Actual								

Activity: 070430102002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** George T Annis **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.5273	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	1.24522 µeq/L	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	10.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	21.54798 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	24.54165 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	10.6185 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.32525 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	63.76512 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	45.35203 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	13.87173 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/16/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	25.95433 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	64.03988 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	60.50948 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94487	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT28 **Visit Date:** 7/25/2007 11:30 AM EDT

Activity: 070725113001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** George T Annis **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	MILD	Detected and Quantified	F	Actual								
flow_streamStage	ABOVE NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070725113002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** George T Annis **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.4369	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	8.8244 µeq/L	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	9.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	30.58468 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	28.37041 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	10.86993 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.74501 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	78.4119 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	45.75355 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	11.80318 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
T_AL_TC_Grab	84.10335 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		8/21/2007				
Dilution: Y	*Recovery:* N	*Correction:* N										

Detect/Quant Lim Description: set 12/17/07

O_AL_TC_Grab	72.93564 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	8/22/2007
Dilution: Y	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	76.57653 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	66.42163 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.86739	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT28 **Visit Date:** 10/31/2007 11:36 AM EDT

Activity: 071031113601 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Elizabeth Lament **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071031113602 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Elizabeth Lament **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.8071	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	11.07911 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	9.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	24.33177 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	4/14/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	23.8049 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/14/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	11.39049 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/14/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	7.50308 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/14/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	93.34433 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/14/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.80691 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	4/14/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	37.70151 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/14/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	14.2415 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/14/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	26.30674 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	9/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	67.03674 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	63.82903 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95215	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT29 **Visit Date:** 1/26/2007 11:30 AM EST
Visit Comment: E.A. LAMENT
// //Partly cloudy, windy, high 40 F.
Sun, clouds, wind, snow flurries & showers, 1/2 - 1" @ sites, highs 30-43, lows 20-33.

Activity: 070126113001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.5712	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	0.78069 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	10.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	21.03781 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	23.72077 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	9.97236 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.4221 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	52.257 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	1.86846 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	39.42651 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	14.20812 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

T_AL_TC_Grab	12.757 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l			7/11/2007			
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	61.15954 µeq/L	Detected and Quantified	F	Actual					2/6/2008			
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	56.28378 µeq/L	Detected and Quantified	F	Actual					4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.92028	Detected and Quantified	F	Actual					4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07012611300F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	2 °C	Detected and Quantified	F	Actual				1/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT29 **Visit Date:** 4/30/2007 9:00 AM EDT

Activity: 070430090001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** George T Annis **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	3 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070430090002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** George T Annis **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.4878	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-0.06613 µeq/L	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	10 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	20.41432 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	21.51014 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	9.82597 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.59092 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	49.6456 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	40.07904 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	13.90714 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
T_AL_TC_Grab	15.93817 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
SBC_IC2_GRAB	59.34785 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	53.96055 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.90923	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Activity: 070430090002 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** George T Annis **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.4746	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-0.25825 µeq/L	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	9.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	20.04329 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	21.56827 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	9.85234 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.60957 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	49.52205 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	39.76135 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	13.951 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

T_AL_TC_Grab	15.86216 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	59.07997 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	53.4946 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.90546	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT29 **Visit Date:** 7/25/2007 8:00 AM EDT

Activity: 070725080001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** George T Annis **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	MILD	Detected and Quantified	F	Actual								
flow_streamStage	ABOVE NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070725080002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** George T Annis **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.3944	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	3.90841 µeq/L	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	9.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	22.6966 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	24.64409 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	10.57135 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	6.77189 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	59.77351 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	41.47527 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	12.84038 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	25.85862 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	8/21/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	64.69043 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	58.26456 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.90067	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT29 **Visit Date:** 10/31/2007 2:30 PM EDT

Activity: 071031143001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Elizabeth Lament **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071031143002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Elizabeth Lament **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.3051	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	0.87362 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	10.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	23.84563 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	25.42098 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	10.25718 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.47044 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	60.179 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/14/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.79854 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	4/14/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	48.51953 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/14/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	17.07909 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/14/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	21.14728 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	9/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	67.00073 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	67.27078 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	1.00403	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT31 **Visit Date:** 1/29/2007 4:30 PM EST

Visit Comment: E.A. LAMENT

// //Sunny and cold, high 24 F.

Some clouds, windy & cold, snow showers, 1-3" @ sites, highs 30-45, lows 9-30.

Activity: 070129163001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.2016	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-4.42715 µeq/L	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	11.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										

Ca_Ions_Grab	15.73363 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	23.34729 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	12.73514 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	5.48871 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	66.018 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	44.83995 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	16.26816 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	35.76 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/11/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	57.31127 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	56.72146 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.98971	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07012916300F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	0 °C	Detected and Quantified	F	Actual				1/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT31 **Visit Date:** 5/7/2007 9:30 AM EDT

Activity: 070507093001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Elizabeth Lament **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	8 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	ABOVE NORMAL	Detected and Quantified	F	Actual								
days_since_precip	2 days	Detected and Quantified	F	Actual								

Activity: 070507093002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Elizabeth Lament **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.0058	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-8.13277 µeq/L	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	11.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	13.99643 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	21.01435 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	12.01786 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.76354 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	61.68666 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	49.19928 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	15.12402 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	61.92382 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/17/2007
Dilution: Y	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
O_AL_TC_Grab	25.91265 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	53.79868 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	56.23103 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	1.04521	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT31 **Visit Date:** 7/25/2007 2:00 PM EDT

Activity: 070725140001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** George T Annis **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	MILD	Detected and Quantified	F	Actual								
flow_streamStage	ABOVE NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070725140002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** George T Annis **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.2899	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	5.31421 µeq/L	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	9.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	23.29748 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	27.31426 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	12.43729 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.32131 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	74.94428 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	44.50164 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	14.69427 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
T_AL_TC_Grab	77.85026 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		8/21/2007				
Dilution: Y	*Recovery:* N	*Correction:* N										

Detect/Quant Lim Description: set 12/17/07

O_AL_TC_Grab	63.82048 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	8/22/2007
Dilution: Y	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	73.37684 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	64.55062 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.87971	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT31 **Visit Date:** 10/29/2007 4:05 PM EDT

Activity: 071029160501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Elizabeth Lament **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071029160502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Elizabeth Lament **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.1153	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-1.3902 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	14.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	32.26313 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	37.11185 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	13.89736 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	12.72569 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	78.33682 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	1.62427 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	70.06061 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.56979 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	68.64619 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	9/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
O_AL_TC_Grab	48.12674 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	11/5/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	96.00453 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	92.86447 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96729	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT32 **Visit Date:** 1/26/2007 1:15 PM EST
Visit Comment: E.A. LAMENT
// //Partly cloudy, windy, high 40 F.
Sun, clouds, wind, snow flurries & showers, 1/2 - 1" @ sites, highs 30-43, lows 20-33.

Activity: 070126131501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.5721	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	2.56222 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	58.63941 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	37.29115 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	10.40527 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.45236 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	51.493 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.22174 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	0.87174 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	76.7496 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	18.05906 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

T_AL_TC_Grab	27.066 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/11/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	113.00993 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	98.24262 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.86933	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070126131501 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.5894	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	2.85178 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	58.75758 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	37.35494 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	10.48487 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.43878 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	51.858 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	9.54571 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	77.1616 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	17.55028 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N						
T_AL_TC_Grab	26.575 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/11/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	113.04267 µeq/L	Detected and Quantified	F	Actual				3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	107.10937 µeq/L	Detected and Quantified	F	Actual				5/13/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.94751	Detected and Quantified	F	Actual				5/13/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 07012613150F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	0 °C	Detected and Quantified	F	Actual				1/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT32 **Visit Date:** 4/30/2007 11:30 AM EDT

Activity: 070430113001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** George T Annis **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	3 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070430113002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** George T Annis **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.3719	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-0.6669 µeq/L	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	58.317 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	35.41596 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	10.54764 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.99404 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	48.94619 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	4.49498 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	76.7406 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	17.6101 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
T_AL_TC_Grab	33.95588 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
SBC_IC2_GRAB	112.28114 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	98.17878 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.8744	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT32 **Visit Date:** 7/25/2007 9:30 AM EDT

Activity: 070725093001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** George T Annis **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.0 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	MODERATE	Detected and Quantified	F	Actual								
flow_streamStage	ABOVE NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070725093002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** George T Annis **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7946	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	16.00605 µeq/L	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	14.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	65.84695 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	43.25378 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	10.65353 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	7.79357 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	57.85877 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	83.25321 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	16.28174 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	77.59564 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	8/21/2007
Dilution: Y	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
O_AL_TC_Grab	52.3301 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	8/22/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	127.55433 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	115.5815 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.90614	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT32 **Visit Date:** 10/31/2007 10:20 AM EDT

Activity: 071031102001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Elizabeth Lament **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	5.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071031102002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Elizabeth Lament **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.8877	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	13.42527 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	14.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	57.99251 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	40.50748 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	11.16971 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	8.93828 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	59.53589 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/14/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	4/14/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	79.766 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/14/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.23486 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/14/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	21.47957 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	9/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	118.61448 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	115.46663 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97346	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT33 **Visit Date:** 1/27/2007 1:08 PM EST

Visit Comment: JOHN WILLIAMS //There was massive clearcut logging going on maybe 1 mile downstream. Large deposits of sand along the banks at sample site. According to logging manager: Washout event during the fall; road is clos//Sunny, 45-50 F. Light snow last Sunday (1-21) still evident.

Activity: 070127130801 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.2713	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	325.57793 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	41.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										

Ca_Ions_Grab	300.29233 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/28/2007
Dilution: Y	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	64.00515 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	18.89359 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	10.5971 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	86.934 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.8944 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	56.77513 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	16.50331 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	393.79467 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	399.75077 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	1.01512	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 070127130801 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.3034	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	325.35137 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	41.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	2/1/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_Grab	304.19788 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	
Dilution: Y	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	63.96852 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	18.65288 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	10.5133 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	86.752 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	56.84861 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	16.20914 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	397.33908 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	398.44962 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	1.00279	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07012713080F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	5 °C	Detected and Quantified	F	Actual				1/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT33 **Visit Date:** 4/26/2007 7:00 PM EDT
Visit Comment: There were signs of heavy land use (logging) en route to the site & I'd heard that there was road repair going on upstream.

Activity: 070426190001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** John Williams **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	ABOVE NORMAL	Detected and Quantified	F	Actual								
days_since_precip	0 days	Detected and Quantified	F	Actual								

Activity: 070426190002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** John Williams **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.2004	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	255.77908 µeq/L	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	34.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	244.97927 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	58.2638 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	18.57613 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	12.43557 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	86.43263 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	54.98389 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	16.10337 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	334.26127 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	326.90684 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.978	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT33 **Visit Date:** 7/26/2007 9:30 AM EDT

Activity: 070726093001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** John Williams **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	16.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070726093002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** John Williams **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.3424	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	767.24191 µeq/L	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	74.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	704.97136 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/24/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	118.65258 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	20.90466 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	14.33052 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	114.81304 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	0.55571 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	59.31749 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	13.91422 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	858.86562 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	841.02933 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.97923	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT33 **Visit Date:** 10/29/2007 10:50 AM EDT
Visit Comment: Hunters were camped out across the road, maybe 100 feet from the run - upstream.

Activity: 071029105001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** John Williams **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	7.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071029105002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** John Williams **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.6245	Detected and Quantified	F	Actual				10/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	615.75472 µeq/L	Detected and Quantified	F	Actual				10/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	63.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	574.17758 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/11/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	100.44981 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	19.14776 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_Grab	15.22593 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	105.99386 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	66.23361 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	17.08278 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	709.00758 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	699.11161 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.98604	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT34 **Visit Date:** 1/27/2007 12:45 PM EST

Visit Comment: JOHN WILLIAMS

// //Sunny, 45-50 F.

Light snow/ice last Sunday (1-21) still evident.

Activity: 070127124501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4368	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	33.01152 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	15.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	2/1/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_Grab	57.83578 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	34.67462 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	17.54506 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	8.7041 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	76.924 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.86585 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	62.99523 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	16.62231 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/9/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	118.76606 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	113.49491 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95562	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07012712450F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	3 °C	Detected and Quantified	F	Actual				1/27/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT34 **Visit Date:** 4/26/2007 7:15 PM EDT

Activity: 0704261915 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** John Williams **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	ABOVE NORMAL	Detected and Quantified	F	Actual								
days_since_precip	0 days	Detected and Quantified	F	Actual								

Activity: 070426191502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** John Williams **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4621	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	32.31809 µeq/L	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	14.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	56.559 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	33.30425 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	17.51625 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.64827 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	76.90859 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	64.6884 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	16.1578 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	118.03427 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	113.20479 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95908	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT34 **Visit Date:** 7/26/2007 9:00 AM EDT

Activity: 070726090001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** John Williams **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	16.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070726090002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** John Williams **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.47	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	78.65824 µeq/L	Detected and Quantified	F	Actual			7/31/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	15.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	7/31/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	81.22908 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	45.32591 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	19.1008 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	9.72744 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	97.54763 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	1.78876 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	51.57257 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	15.07145 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	155.38973 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	147.09102 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94659	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT34 **Visit Date:** 10/29/2007 11:23 AM EDT

Activity: 071029112301 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** John Williams **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	8.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071029112302 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** John Williams **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7718	Detected and Quantified	F	Actual				10/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	79.48291 µeq/L	Detected and Quantified	F	Actual				10/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	85.13501 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	50.9655 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	18.89579 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	13.9895 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	91.69595 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	65.25946 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	19.00524 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	168.9923 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	163.78811 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9692	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: VTSSS **Station ID:** VT36 **Visit Date:** 1/29/2007 9:20 AM EST

Visit Comment: DAVID DEMAREST
//
Few snow squalls //Clear, cold

Activity: 070129092001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.4835	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	1.23636 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	26.14808 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	42.58961 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	19.99653 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	25.00406 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	84.029 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	1.84518 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	90.52933 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	20.71172 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	31.571 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/11/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	113.74478 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	114.32259 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	1.00508	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07012909200F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	1.5 °C	Detected and Quantified	F	Actual				1/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

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Organization: Shenandoah National Park
Project ID: VTSSS **Station ID:** VT36 **Visit Date:** 4/24/2007 1:59 PM EDT

Activity: 070424135901 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** David Demarest **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.8 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
days_since_precip		Detected and Quantified	F	Actual								

Activity: 070424135902 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** David Demarest **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.269	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-2.80715 µeq/L	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	26.71999 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	41.08889 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	19.23746 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	28.37353 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	76.13225 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	97.0983 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	20.05419 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	36.90721 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	115.42637 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	114.38584 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.99099	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: VTSSS **Station ID:** VT36 **Visit Date:** 7/30/2007 9:10 AM EDT

Activity: 070730091001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	INTERSTITIAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070730091002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.3881	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	2.39139 µeq/L	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	13.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	20.73527 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	33.99249 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	22.23421 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	26.57481 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	110.53624 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	1.43106 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	74.11749 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.81261 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
T_AL_TC_Grab	24.51395 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		8/21/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Detect/Quant Lim Description: set 12/17/07

SBC_IC2_GRAB	103.54328 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	99.75255 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.96339	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: VTSSS **Station ID:** VT36 **Visit Date:** 10/29/2007 10:00 AM EDT

Activity: 071029100001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** David Demarest **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071029100002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** David Demarest **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.6203	Detected and Quantified	F	Actual				10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	4.31559 µeq/L	Detected and Quantified	F	Actual				10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	14.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	20.18772 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	32.63447 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	21.64564 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	28.61317 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	107.15576 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.28875 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.53548 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	72.5664 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	23.36473 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	21.81053 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	9/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	103.36975 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	100.7822 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97497	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT37 **Visit Date:** 1/29/2007 12:00 PM EST
Visit Comment: MIKE HARVEY
//
Snowy, overcast, 30 - 50.
//Clear, cold, patchy snow.

Activity: 070129120001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2874	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	22.34413 µeq/L	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/6/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	39.00221 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	50.64171 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	21.53065 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	13.9614 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	71.081 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	13.11295 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	73.45824 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	14.37451 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	125.14247 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	123.28983 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.9852	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07012912000F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	1 °C	Detected and Quantified	F	Actual				1/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT37 **Visit Date:** 4/25/2007 8:45 AM EDT

Activity: 070425084501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Michael Harvey\Steve Rutkowski **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	5 days	Detected and Quantified	F	Actual								

Activity: 070425084502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Michael Harvey\Steve Rutkowski **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2388	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	20.57792 µeq/L	Detected and Quantified	F	Actual			5/2/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	16.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	5/2/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	39.33171 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	49.18641 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	20.86803 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	16.69261 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	71.09019 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	5.61489 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	74.48734 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	13.66878 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	126.08526 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	114.34893 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.90692	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT37 **Visit Date:** 7/25/2007 12:00 PM EDT

Activity: 070725120001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Michael Harvey **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070725120002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Michael Harvey **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.3732	Detected and Quantified	F	Actual				8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	39.39778 µeq/L	Detected and Quantified	F	Actual				8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	15.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	44.79917 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	57.0603 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	25.69035 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	20.80858 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	84.20035 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	0.61627 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NO3_Ions_Grab	17.54188 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	67.82458 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	14.32619 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	148.97467 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	139.09043 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.93365	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT37 **Visit Date:** 10/30/2007 2:05 PM EDT

Activity: 071030140501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Michael Harvey\Buddie Chandler **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071030140502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Michael Harvey\Buddie Chandler **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2683	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	31.69201 µeq/L	Detected and Quantified	F	Actual			11/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	17.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	11/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	46.32203 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	60.03822 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	25.9863 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	19.33468 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	84.17516 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	26.51937 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	70.46651 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	18.69261 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	151.68773 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	147.3705 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97154	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Activity: 071030140502 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Michael Harvey\Buddie Chandler **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2931	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	31.70361 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	46.79148 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	60.18557 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	25.97402 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	19.37105 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	84.17516 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	27.5191 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	70.67038 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	18.75813 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	152.32862 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	148.65122 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.97586	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT38 **Visit Date:** 1/30/2007 9:03 AM EST
Visit Comment: PAUL BUGAS
// //Cold, fair.
Dry, cold.

Activity: 070130090301 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6039	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	51.67859 µeq/L	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	25.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	78.85876 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	78.89595 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	34.4508 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	15.86959 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	76.194 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	3.45307 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	114.21396 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	16.19793 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	208.0816 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	185.54355 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.89169	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07013009030F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	1 °C	Detected and Quantified	F	Actual				1/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT38 **Visit Date:** 4/30/2007 10:21 AM EDT

Activity: 070430102101 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Paul Bugas **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	5 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

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Activity: 070430102102 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Paul Bugas **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5624	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	49.39895 µeq/L	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	23.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	72.45135 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	72.38565 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	33.51707 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	19.31327 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	77.50046 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	119.16811 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	15.4071 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	197.67384 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	184.01466 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.9309	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT38 **Visit Date:** 7/30/2007 1:15 PM EDT
Visit Comment: Water is extremely low.

Activity: 070730131501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Matt Henderson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	22.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	MILD	Detected and Quantified	F	Actual								
flow_streamStage	INTERSTITIAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070730131502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Matt Henderson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9394	Detected and Quantified	F	Actual				8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	116.21923 µeq/L	Detected and Quantified	F	Actual				8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	27.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	107.12816 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	103.47574 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	43.21236 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_Grab	28.81722 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	89.42133 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	2.04815 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	31.38203 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	100.82804 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	16.47462 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	284.68163 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	264.90392 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93053	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT38 **Visit Date:** 10/30/2007 3:58 PM EDT

Activity: 071030155801 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Paul Bugas **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071030155802 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Paul Bugas **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.3171	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	68.77104 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	26.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	94.33235 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	91.87521 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	38.9559 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	22.55227 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	89.24408 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.55587 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	13.76177 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	113.57486 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.46606 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	248.2716 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	217.57373 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.87635	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT39 **Visit Date:** 1/29/2007 1:40 PM EST

Visit Comment: H. HUFFMAN //Tag missing //Cold, clear.
Cold, snow showers, more snow and ice than other sites.

Activity: 070129134001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.1919	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-3.80171 µeq/L	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	11.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	10.35244 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	16.87759 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	14.93124 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	12.34031 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	77.273 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	47.4708 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	15.02821 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	71.292 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
O_AL_TC_Grab	13.805 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	54.50808 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	58.7378 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	1.0776	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07012913400F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	1 °C	Detected and Quantified	F	Actual				1/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT39 **Visit Date:** 5/3/2007 3:30 PM EDT

Activity: 070503153001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	0 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070503153002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	4.9968	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-8.23387 µeq/L	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	12.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	11.72677 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	17.73699 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	14.56265 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	14.01572 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	67.69032 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	56.29444 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	14.19809 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
T_AL_TC_Grab	74.48759 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/17/2007				
Dilution: Y	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												

O_AL_TC_Grab	16.58588 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	58.04863 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	62.29916 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	1.07322	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT39 **Visit Date:** 7/25/2007 11:04 AM EDT

Activity: 070725110401 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070725110402 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.0598	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-3.64992 µeq/L	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	8.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	8.69015 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	12.91967 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	15.52096 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	11.67761 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	85.35941 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	40.48201 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	15.62872 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	45.13142 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	8/21/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	48.81489 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	52.50131 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	1.07552	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT39 **Visit Date:** 10/25/2007 12:08 PM EDT

Activity: 071025120801 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.0 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071025120802 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.1504	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-3.87291 µeq/L	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	9.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	8.39605 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	13.81409 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	15.08324 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	20.6742 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	84.55626 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	1.62772 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	40.82972 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	18.95153 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	49.00748 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	9/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
O_AL_TC_Grab	30.66554 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	11/5/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	57.97408 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	57.53606 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.99244	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT40 **Visit Date:** 1/29/2007 12:45 PM EST

Visit Comment: H. HUFFMAN //Possible contamination - sample dropped and chased downstream. //Cold, clear.
Cold, more snow and ice than other sites.

Activity: 070129124501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.8708	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	10.16977 µeq/L	Detected and Quantified	F	Actual			2/2/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	8.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	2/2/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_Grab	10.69816 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	14.54457 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	15.33303 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	11.8451 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	89.308 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	25.7137 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	14.82467 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	23.41 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/11/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	52.42736 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	50.74864 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96798	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07012912450F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	1 °C	Detected and Quantified	F	Actual				1/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT40 **Visit Date:** 5/3/2007 11:09 AM EDT

Activity: 070503110901 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13 °C	Detected and Quantified	F	Actual								
weather	8	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	0 days	Detected and Quantified	F	Actual								

Activity: 070503110902 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.9879	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	11.40643 µeq/L	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	10.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	13.57562 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	23.97286 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	21.07195 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	21.44857 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	77.19663 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	51.81487 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	15.50432 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	6.89232 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	80.0755 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	78.76612 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.98365	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT40 **Visit Date:** 7/25/2007 9:23 AM EDT

Activity: 070725092301 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.0 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								

water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	LOW	Detected and Quantified	F	Actual
general_observation		Detected and Quantified	F	Actual

Activity: 070725092302 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.1031	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	19.05629 µeq/L	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	10.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	13.39803 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	24.36778 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	22.58309 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	23.63962 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	87.87224 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.24206 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	43.16606 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	17.34016 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	84.23058 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
SAA_MET_IC2_GRAB	79.60301 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.94506	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT40 **Visit Date:** 10/25/2007 1:26 PM EDT

Activity: 071025132601 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.0 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071025132602 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0539	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	22.67489 µeq/L	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	9.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	15.36044 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	25.0866 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	21.06076 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	24.91593 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	88.0228 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	39.91693 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	17.66086 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	86.43023 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	80.29318 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.92899	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT41 **Visit Date:** 1/29/2007 2:45 PM EST
Visit Comment: H. HUFFMAN
//
Cold, snow showers.
//Cold, clear.

Activity: 070129144501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4237	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	24.04728 µeq/L	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	13.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	50.37666 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	26.5388 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	15.60478 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	13.62738 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	71.795 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	1.85394 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	63.61163 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	15.4315 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	106.15412 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	104.94435 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.9886	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07012914450F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	2 °C	Detected and Quantified	F	Actual				1/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT41 **Visit Date:** 5/3/2007 4:00 PM EDT

Activity: 070503160001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	0 days	Detected and Quantified	F	Actual								

Activity: 070503160002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2991	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	23.40903 µeq/L	Detected and Quantified	F	Actual			5/10/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	12.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	5/10/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	46.18483 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	26.47419 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	15.69131 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	17.07767 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	71.56799 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	63.73507 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	14.94113 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	105.4345 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	102.12573 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96862	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT41 **Visit Date:** 7/25/2007 12:30 PM EDT

Activity: 070725123001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	20.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070725123002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6341	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	44.5324 µeq/L	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	12 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	51.65816 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	28.12484 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	17.39335 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	19.18063 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	83.23483 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	49.30744 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	15.51901 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	116.36348 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	109.39935 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94015	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT41 **Visit Date:** 10/25/2007 11:13 AM EDT

Activity: 071025111301 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	6	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071025111302 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.3339	Detected and Quantified	F	Actual				11/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	40.19844 µeq/L	Detected and Quantified	F	Actual			11/1/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	12.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	11/1/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	50.66558 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	28.46422 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	16.87794 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	19.27244 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	82.8242 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	48.43938 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	18.19763 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	115.28668 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	106.87595 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.92705	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT42 **Visit Date:** 1/29/2007 11:00 AM EST
Visit Comment: K. HICKMAN
//
Cold, clear. //Cold, clear.

Activity: 070129110001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6996	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	60.88515 µeq/L	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	12.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	37.74536 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	22.59122 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	45.79158 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.85433 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	128.467 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	3.85423 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	16.51736 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	19.68183 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	112.98899 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	100.93857 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.89335	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07012911000F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	2.8 °C	Detected and Quantified	F	Actual				1/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT42 **Visit Date:** 5/2/2007 4:30 PM EDT

Activity: 070502163001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	16 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
days_since_precip	6 days	Detected and Quantified	F	Actual								

Activity: 070502163002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8111	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	77.88871 µeq/L	Detected and Quantified	F	Actual			5/10/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	12.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	5/10/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	46.22682 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	26.16016 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	50.04762 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	9.45023 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	131.74025 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	20.73965 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	19.56941 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	131.89133 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	118.23827 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.89648	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT42 **Visit Date:** 7/25/2007 10:35 AM EDT

Activity: 070725103501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Herbie Huffman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	16.0 °C	Detected and Quantified	F	Actual								
weather	8	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070725103502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Herbie Huffman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6959	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	112.14523 µeq/L	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	15.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	61.38574 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	36.40883 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	60.23317 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.4671 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	160.68 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	0.40479 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	10.09388 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	18.15099 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	19.74026 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	168.89963 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	160.13036 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94808	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT42 **Visit Date:** 10/29/2007 9:05 AM EDT

Activity: 071029090501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071029090502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7416	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	90.82887 µeq/L	Detected and Quantified	F	Actual			11/2/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	15.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	11/2/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	55.37564 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	33.25467 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	58.87443 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	11.13714 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	153.75597 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	20.44411 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	25.00714 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	158.64838 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	136.32062 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.85926	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT43 **Visit Date:** 1/25/2007 12:30 PM EST
Visit Comment: MARVIN GILBERT
//
1/2" sleet on 1/21/07; partly cloudy other days.
//Partly cloudy.

Activity: 070125123001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5173	Detected and Quantified	F	Actual				1/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	55.10841 µeq/L	Detected and Quantified	F	Actual				1/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	9.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/31/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	29.82192 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	11.02928 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	39.62264 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	4.89171 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	101.858 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	11.57991 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	17.77367 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	85.37205 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	84.50249 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.98981	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT43 **Visit Date:** 4/25/2007 9:46 AM EDT

Visit Comment: Ash fallout from Piney/Friar forest fire visable at this site, like snow flurries.

Activity: 070425094601 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Marvin Gilbert **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	7 days	Detected and Quantified	F	Actual								

Activity: 070425094602 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Marvin Gilbert **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6513	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	56.63334 µeq/L	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	10 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	34.37479 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	11.64516 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	39.59804 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	5.19013 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	95.39688 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	11.29419 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	17.92635 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	90.81462 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	85.89438 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94582	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT43 **Visit Date:** 7/25/2007 2:30 PM EDT

Activity: 070725143001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Marvin Gilbert **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10.0 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								

flow_streamStage	LOW	Detected and Quantified	F	Actual
general_observation		Detected and Quantified	F	Actual

Activity: 070725143002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marvin Gilbert **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6561	Detected and Quantified	F	Actual				8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	79.1121 µeq/L	Detected and Quantified	F	Actual				8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	11.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	49.59872 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	16.51135 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	45.92103 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.50538 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	117.14831 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.31045 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	2.14578 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	10.6801 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	18.31883 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	118.84693 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	110.25681 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.92772	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT43 **Visit Date:** 10/29/2007 4:20 PM EDT
Visit Comment: Finally, Rain!

Activity: 071029162001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marvin Gilbert **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071029162002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marvin Gilbert **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.411	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	64.69847 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	11.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	44.35285 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	15.89897 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	43.40436 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	8.72941 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	110.58579 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	20.9158 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	19.76919 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/11/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	112.39209 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	105.42396 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.938	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT44 **Visit Date:** 1/25/2007 2:10 PM EST
Visit Comment: MARVIN GILBERT
// //Partly cloudy.
1/2" sleet on 1/21/07; partly cloudy other days.

Activity: 070125141001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5861	Detected and Quantified	F	Actual				1/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	54.58166 µeq/L	Detected and Quantified	F	Actual				1/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	14.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/31/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	45.92911 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	18.15639 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	51.38553 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	5.96072 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	126.774 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	1.39602 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	33.62969 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	20.60072 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	121.43825 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	110.20809 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.90752	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT44 **Visit Date:** 4/26/2007 2:20 PM EDT

Visit Comment: Ash fallout less at this site when compared to Greasy Spring Branch site

Activity: 070426142001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Marvin Gilbert **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	8 days	Detected and Quantified	F	Actual								

Activity: 070426142002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Marvin Gilbert **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6066	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	63.09846 µeq/L	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	14.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	49.14388 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	19.33476 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	52.49594 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	6.95664 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	123.21157 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	34.26849 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	20.38476 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	127.93772 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	117.79221 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9207	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT44 **Visit Date:** 7/25/2007 4:30 PM EDT

Visit Comment: Sample taken one pool downstream. (Lack of flow due to stream bed change and very low water.) Est. distance < 5 yds.

Activity: 070725163001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Marvin Gilbert **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	16.0 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								

water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	LOW	Detected and Quantified	F	Actual
general_observation		Detected and Quantified	F	Actual

Activity: 070725163002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marvin Gilbert **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.678	Detected and Quantified	F	Actual				8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	87.78766 µeq/L	Detected and Quantified	F	Actual				8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	15.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	66.03163 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	24.41378 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	60.64767 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	9.42319 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	145.70083 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.49566 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	5.46096 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	31.80763 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	20.66806 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	161.01193 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
SAA_MET_IC2_GRAB	145.72431 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.90505	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Activity: 070725163002 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Marvin Gilbert **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4263	Detected and Quantified	F	Actual				8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	92.25649 µeq/L	Detected and Quantified	F	Actual				8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	67.92514 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	24.6782 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	62.09008 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.16471 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	146.29024 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.34002 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	8.37847 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	32.13073 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.18463 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	165.19815 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	154.95032 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93797	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT44 **Visit Date:** 10/29/2007 3:00 PM EDT

Activity: 071029150001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Marvin Gilbert **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071029150002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Marvin Gilbert **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.3259	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	73.95538 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	15.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	11/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	57.37959 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	4/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	22.81605 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	59.3069 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	11.66248 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	132.66834 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	3.86287 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	4/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	4/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	42.93687 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	26.2967 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/25/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	155.02789 µeq/L	Detected and Quantified	F	Actual			12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	143.22945 µeq/L	Detected and Quantified	F	Actual			12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.92389	Detected and Quantified	F	Actual			12/1/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT45 **Visit Date:** 1/27/2007 12:50 PM EST

Visit Comment: MARVIN GILBERT //Peavine Complex Fire (3 forest fires, same mountain) burned within 50 yards of sample station. //Clear & warm.
1/2" sleet on 1/21/07; partly cloudy other days.

Activity: 070127125001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.3291	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	33.28449 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	22.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	29.44296 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	102.59468 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	32.73881 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	20.74262 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	108.83 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	126.99467 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	20.56246 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	185.52557 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	180.88212 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.97497	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT45 **Visit Date:** 4/25/2007 11:25 AM EDT
Visit Comment: Green algae seen

Activity: 070425112501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marvin Gilbert **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	7 days	Detected and Quantified	F	Actual								

Activity: 070425112502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marvin Gilbert **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.3837	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	36.50528 µeq/L	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	15 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	20.22246 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	43.6739 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	30.99089 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	26.39306 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	105.94895 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	58.45183 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.08147 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	121.28681 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	116.07908 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95706	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT45 **Visit Date:** 7/25/2007 12:45 PM EDT

Visit Comment: Sample taken one pool upstream (lack of flow due to stream bed change and very low water). Est. distance 15 yds.

Activity: 070725124501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Marvin Gilbert **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.5 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								

water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	LOW	Detected and Quantified	F	Actual
general_observation		Detected and Quantified	F	Actual

Activity: 070725124502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marvin Gilbert **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6035	Detected and Quantified	F	Actual				8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	74.73212 µeq/L	Detected and Quantified	F	Actual				8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	15.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	29.70965 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	62.21161 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	36.25159 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	26.59811 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	127.38726 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.26322 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	42.1171 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	20.79512 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	155.03418 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
SAA_MET_IC2_GRAB	137.68484 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.88809	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT45 **Visit Date:** 10/29/2007 12:00 PM EDT

Activity: 071029120001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Marvin Gilbert **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071029120002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Marvin Gilbert **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5823	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	63.35889 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	33.12868 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	67.70901 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	41.91842 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	27.33724 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	120.93455 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	70.19023 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	25.74635 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	170.09985 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	159.33597 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93672	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT46 **Visit Date:** 1/29/2007 9:30 AM EST
Visit Comment: H. HUFFMAN
//
Cold, snow showers.
//Cold, clear.

Activity: 070129093001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6247	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	63.47048 µeq/L	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	15.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	57.62364 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	19.62187 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	57.13798 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	3.37936 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	131.87 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	37.57654 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	22.9352 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	137.76935 µeq/L	Detected and Quantified	F	Actual				2/6/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	124.02272 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.90022	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07012909300F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	2 °C	Detected and Quantified	F	Actual				1/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT46 **Visit Date:** 5/2/2007 10:20 AM EDT

Activity: 070502102001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	6 days	Detected and Quantified	F	Actual								

Activity: 070502102002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7787	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	80.85802 µeq/L	Detected and Quantified	F	Actual			5/10/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	14.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	5/10/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	65.58632 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	20.80297 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	60.33102 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	4.96943 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	129.96161 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.75767 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	37.54379 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.18721 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	152.44741 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	140.62952 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.92248	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Activity: 070502102002 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5747	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	82.83725 µeq/L	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	14.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	65.97978 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	20.75396 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	60.3581 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	4.88389 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	129.36898 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	37.85178 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	22.13379 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	151.98223 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	142.86332 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.94	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT46 **Visit Date:** 7/25/2007 3:05 PM EDT

Activity: 070725150501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070725150502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7706	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	102.33678 µeq/L	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	80.70669 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	25.13742 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	66.65966 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_Grab	5.70896 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	154.35643 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.39611 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	5.13484 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	32.40037 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	23.30271 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	178.60884 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	163.1747 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.91359	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT46 **Visit Date:** 10/25/2007 9:06 AM EDT

Activity: 071025090601 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	6	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071025090602 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6628	Detected and Quantified	F	Actual				11/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	89.04469 µeq/L	Detected and Quantified	F	Actual				11/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	92.73237 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	29.81456 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	68.52474 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	13.61795 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	139.23593 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	45.47739 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	37.03629 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	204.69612 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	171.59887 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.83831	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT48 **Visit Date:** 1/31/2007 11:45 AM EST
Visit Comment: CHARLES STULTZ
// //Clear, very cold, 10 F.
Cold, cloudy, light snow and ice.

Activity: 070131114501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6145	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	41.19232 µeq/L	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	25.60029 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	45.96216 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	35.10973 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	29.388 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	118.756 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	73.58442 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L			8/29/2007		
Dilution: N	*Recovery:* N	*Correction:* N									
Cl_Ions_Grab	17.49736 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L			8/29/2007		
Dilution: N	*Recovery:* N	*Correction:* N									
SBC_IC2_GRAB	136.06668 µeq/L	Detected and Quantified	F	Actual					2/6/2008		
Dilution: N	*Recovery:* N	*Correction:* N									
SAA_MET_IC2_GRAB	132.3146 µeq/L	Detected and Quantified	F	Actual					4/23/2008		
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.97242	Detected and Quantified	F	Actual					4/23/2008		
Dilution: N	*Recovery:* N	*Correction:* N									

Activity: 07013111450F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	0 °C	Detected and Quantified	F	Actual				1/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT48 **Visit Date:** 4/30/2007 11:50 AM EDT
Visit Comment: Sample was taken on the 30th, refrigerated, packed and shipped on the 1st.

Activity: 070430115001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Charles W. Stultz **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	1 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070430115002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Charles W. Stultz **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5714	Detected and Quantified	F	Actual				5/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	38.76065 µeq/L	Detected and Quantified	F	Actual				5/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	15.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/3/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	22.08472 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	39.10269 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	31.84202 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	33.35858 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	115.37888 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	64.18342 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	17.09929 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	126.39451 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	120.08386 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.95007	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT48 **Visit Date:** 7/30/2007 11:15 AM EDT

Activity: 070730111501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Charles W. Stultz **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070730111502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Charles W. Stultz **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8776	Detected and Quantified	F	Actual				8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	92.68087 µeq/L	Detected and Quantified	F	Actual				8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	41.84554 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	61.7307 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	45.55473 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_Grab	44.11002 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	142.9517 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	68.56088 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	17.08639 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	193.24749 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	178.36864 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.92301	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT48 **Visit Date:** 10/31/2007 1:30 PM EDT

Visit Comment: After a very long dry period, with very little water flow we received 5+ inches of rain.

Activity: 071031133001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Charles W. Stultz **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	8.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071031133002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Charles W. Stultz **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6283	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	70.98721 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	20.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	41.30977 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	64.10349 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	46.81655 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	40.37545 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	130.86934 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	93.63929 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	22.17432 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/14/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	192.61176 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	186.84132 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.97004	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT49 **Visit Date:** 1/26/2007 12:00 PM EST
Visit Comment: HOLDEN MASON
//
coldest yet this year.
Snow-2"-4"; colder temp.
//Air temp-3C; partly cloudy/calm

Activity: 070126120001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.151	Detected and Quantified	F	Actual				1/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	20.57926 µeq/L	Detected and Quantified	F	Actual				1/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/31/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	55.4425 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	60.37443 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	18.4139 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	12.50571 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	84.809 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	3.89522 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	104.29741 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	16.78085 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	146.74304 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	145.55274 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.99189	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07012612000F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	1 °C	Detected and Quantified	F	Actual				1/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT49 **Visit Date:** 4/25/2007 12:30 PM EDT

Activity: 070425123001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Thomas Holland **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	5 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070425123002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Thomas Holland **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.8569	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	11.56093 µeq/L	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	56.41607 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	57.7943 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	16.95046 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	15.65931 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	80.20995 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	2.42344 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	112.10034 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	15.98883 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
T_AL_TC_Grab	28.98594 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/12/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
SBC_IC2_GRAB	146.82664 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	142.07354 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.96763	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT49 **Visit Date:** 7/30/2007 9:50 AM EDT

Activity: 070730095001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Holden Mason **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070730095002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Holden Mason **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6251	Detected and Quantified	F	Actual				8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	88.09095 µeq/L	Detected and Quantified	F	Actual				8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	89.59551 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	58.08124 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	24.4043 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	8.72281 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	100.64444 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	67.6124 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	13.83752 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	180.81036 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	169.58137 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9379	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT49 **Visit Date:** 10/25/2007 1:00 PM EDT

Activity: 071025130001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Holden Mason **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.0 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

general_observation		Detected and Quantified	F	Actual

Activity: 071025130002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Holden Mason **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.94	Detected and Quantified	F	Actual				10/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	143.70261 µeq/L	Detected and Quantified	F	Actual				10/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	24.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	146.80904 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	62.61011 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	26.53221 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	16.74841 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	88.0228 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	0.53677 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	75.4885 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	19.23643 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	252.70627 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	238.96431 µeq/L	Detected and Quantified	F	Actual				4/23/2008		
Dilution: N	*Recovery:* N	*Correction:* N								
IONRATIO_MET_IC2_GRAB	0.94562	Detected and Quantified	F	Actual				4/23/2008		
Dilution: N	*Recovery:* N	*Correction:* N								

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT50 **Visit Date:** 1/26/2007 10:30 AM EST
Visit Comment: HOLDEN MASON
//
coldest yet this year.
Snow-2"-4"; colder temp.
//Air temp-4C; partly cloudy/calm

Activity: 070126103001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	4.8871	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-7.74206 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	23.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	31.31469 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	55.07043 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	14.18144 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	12.83117 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	74.053 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	5.24472 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	124.8139 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	16.25572 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	199.862 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
O_AL_TC_Grab	22.731 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	113.40423 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	138.57228 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	1.22193	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07012610300F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	1 °C	Detected and Quantified	F	Actual				1/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT50 **Visit Date:** 4/25/2007 11:30 AM EDT

Activity: 070424113001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Thomas Holland **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								

flow_streamStage	NORMAL	Detected and Quantified	F	Actual
days_since_precip	5 days	Detected and Quantified	F	Actual

Activity: 070425113002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Thomas Holland **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	4.7899	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-12.99296 µeq/L	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	24 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	31.92237 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	49.40865 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	13.58029 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	16.13983 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	71.86542 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	4.27339 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	124.70734 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	15.53828 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

T_AL_TC_Grab	184.58008 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/17/2007
Dilution: Y	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
O_AL_TC_Grab	24.60491 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	111.05764 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	131.52605 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	1.1843	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT50 **Visit Date:** 7/26/2007 11:30 AM EDT

Activity: 070726113001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Thomas Holland **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	16.0 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070726113002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Thomas Holland **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	4.9673	Detected and Quantified	F	Actual				8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-1.80268 µeq/L	Detected and Quantified	F	Actual				8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	15.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	8/1/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	22.34235 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	47.45181 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	15.75446 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	7.43153 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	97.93456 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	94.34243 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	15.07924 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	115.63799 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	8/21/2007
Dilution: Y	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
O_AL_TC_Grab	16.07399 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	8/22/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	92.98665 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	107.65949 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	1.1578	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT50 **Visit Date:** 10/25/2007 10:00 AM EDT

Activity: 071025100001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Holden Mason **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.5 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071025100002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Holden Mason **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.069	Detected and Quantified	F	Actual				10/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	1.07426 µeq/L	Detected and Quantified	F	Actual				10/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	25.08315 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	57.74696 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	16.52651 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	17.86095 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	89.37177 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	102.22018 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.41184 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	116.98261 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	9/23/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
O_AL_TC_Grab	35.06362 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	11/5/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	117.22407 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	124.74678 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	1.06417	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: VTSSS **Station ID:** VT51 **Visit Date:** 1/29/2007 12:20 PM EST

Visit Comment: DAVID DEMAREST
//
Few snow squalls //Clear, cold

Activity: 070129122001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.0126	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	162.31385 µeq/L	Detected and Quantified	F	Actual			2/1/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	34.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	2/1/2007
Dilution: N	*Recovery:* N	*Correction:* Y					
Ca_Ions_Grab	125.87407 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	122.75433 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	60.65531 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	13.24146 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	147.64 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	116.34961 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	30.58619 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	322.53167 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	309.29015 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95895	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07012912200F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	2 °C	Detected and Quantified	F	Actual				1/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: VTSSS **Station ID:** VT51 **Visit Date:** 4/26/2007 3:25 PM EDT

Activity: 070426152501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.5 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
days_since_precip	8 days	Detected and Quantified	F	Actual								

Activity: 070426152502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.2334	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	168.8107 µeq/L	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	35.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	126.84973 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	119.86412 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	66.38908 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	17.34935 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	154.61152 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	121.90645 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	29.51902 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	330.45878 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	320.27667 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96919	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: VTSSS **Station ID:** VT51 **Visit Date:** 7/30/2007 11:30 AM EDT

Activity: 070730113001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	23.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	INTERSTITIAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

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Activity: 070730113002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.5521	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	361.47143 µeq/L	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	42.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	192.29923 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	170.76043 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/24/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	103.16773 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/24/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	20.90268 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	197.56029 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	78.52704 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	28.46291 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	487.13657 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	468.50188 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.96175	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: VTSSS **Station ID:** VT51 **Visit Date:** 10/29/2007 12:25 PM EDT

Activity: 071029122501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** David Demarest **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071029122502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** David Demarest **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.4152	Detected and Quantified	F	Actual				10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	313.91468 µeq/L	Detected and Quantified	F	Actual				10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	45 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	189.47547 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	179.45131 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/11/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	99.484 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/11/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	19.86137 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	213.23982 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	107.2827 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	49.14447 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	488.27865 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	470.38235 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96335	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT52 **Visit Date:** 1/24/2007 12:30 PM EST

Visit Comment: T. HOLLAND

// //Cloudy & cold.

Light skiff of snow with weather turning sharply colder today; warm conditions prior to this day; highs 60, low 30.

Activity: 070124123001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.3114	Detected and Quantified	F	Actual				1/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	33.47094 µeq/L	Detected and Quantified	F	Actual				1/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	21 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/31/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										

Ca_Ions_Grab	92.3241 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	49.97012 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	16.83926 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	11.10451 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	80.112 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	112.1521 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	18.77179 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	170.24449 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	164.43533 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96588	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07012412300F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	5 °C	Detected and Quantified	F	Actual				1/24/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

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Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT52 **Visit Date:** 4/24/2007 11:30 AM EDT

Activity: 070424113001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Holden Mason **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	6 days	Detected and Quantified	F	Actual								

Activity: 070424113002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Holden Mason **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2541	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	23.51869 µeq/L	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	21 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	88.08107 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	49.54917 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	16.97912 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	13.0597 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	75.15107 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	116.96435 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	18.25183 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	167.67556 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	158.77537 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94692	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT52 **Visit Date:** 7/25/2007 1:20 PM EDT

Activity: 070725132001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Holden Mason **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070725132002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Holden Mason **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.876	Detected and Quantified	F	Actual				8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	124.56892 µeq/L	Detected and Quantified	F	Actual			8/1/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	21.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	8/1/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	114.93809 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	77.52397 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	21.63761 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	8.15121 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	98.13889 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	73.20036 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	16.42434 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	222.25738 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	214.23412 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9639	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT52 **Visit Date:** 10/25/2007 9:00 AM EDT

Activity: 071025090001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Holden Mason **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.0 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071025090002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Holden Mason **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.1285	Detected and Quantified	F	Actual				10/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	220.58977 µeq/L	Detected and Quantified	F	Actual				10/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	30.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	211.02054 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	80.24466 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	18.74861 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	15.65621 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	91.49257 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	68.86931 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.98316 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	325.67652 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	312.48274 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95949	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: VTSSS **Station ID:** VT53 **Visit Date:** 1/29/2007 10:15 AM EST

Visit Comment: DAVID DEMAREST
//
Few snow squalls //Clear, cold

Activity: 070129101501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0214	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	12.55895 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	28.18965 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	48.25213 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	26.22907 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	33.17949 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	86.652 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	96.02643 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.17482 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	135.85684 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	130.8007 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96278	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07012910150F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	1.7 °C	Detected and Quantified	F	Actual				1/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: Shenandoah National Park
Project ID: VTSSS **Station ID:** VT53 **Visit Date:** 4/24/2007 2:47 PM EDT

Activity: 070424144701 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** David Demarest **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	16 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
days_since_precip		Detected and Quantified	F	Actual								

Activity: 070424144702 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** David Demarest **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.9656	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	8.87417 µeq/L	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	25.57968 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	43.13373 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	25.21723 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	38.66104 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	82.93103 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	96.34478 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.23024 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	11.87995 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/17/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	132.59818 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	127.48969 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96147	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: VTSSS **Station ID:** VT53 **Visit Date:** 7/30/2007 10:10 AM EDT

Activity: 070730101001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	INTERSTITIAL	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070730101002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.1934	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	32.80198 µeq/L	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	14.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	25.48246 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	39.6868 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	27.50454 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	37.73189 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	124.75003 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.7665 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	1.516 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	62.2836 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	20.87244 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	131.17219 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	117.47402 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.89557	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Activity: 070730101002 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** James Atkinson **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2086	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	32.54862 µeq/L	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	14.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	24.41443 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	39.7083 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	27.55472 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	37.76388 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	126.1164 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.72736 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	1.92054 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	62.22921 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	20.83284 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	130.16869 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	117.53121 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.90291	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: VTSSS **Station ID:** VT53 **Visit Date:** 10/29/2007 10:45 AM EDT

Activity: 071029104501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** David Demarest **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 071029104502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** David Demarest **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.1472	Detected and Quantified	F	Actual				10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	22.80402 µeq/L	Detected and Quantified	F	Actual				10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	30.84318 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	51.09708 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	30.60093 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_Grab	41.6413 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	115.10585 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.78076 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	99.78937 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	24.31589 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	154.18899 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	147.69004 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95785	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT54 **Visit Date:** 4/26/2007 10:58 AM EDT

Activity: 070426105801 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Michael Harvey\Buddie Chandler **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	6 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070426105802 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Michael Harvey\Buddie Chandler **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5154	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	42.98957 µeq/L	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	26 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	79.65792 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	77.08307 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	32.51625 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	22.38141 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	85.6542 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	16.95376 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	120.72526 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	16.4828 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	211.64515 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	197.15139 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.93152	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT54 **Visit Date:** 7/30/2007 11:00 AM EDT

Activity: 070730110001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Joe Emswiler **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15.0 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070730110002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Joe Emswiler **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5835	Detected and Quantified	F	Actual				8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	96.02993 µeq/L	Detected and Quantified	F	Actual				8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	28.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	109.74757 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	104.35385 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	45.35379 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_Grab	28.51938 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	106.84737 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	51.75684 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	108.03829 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	16.88375 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	287.98109 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	272.70881 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94697	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT54 **Visit Date:** 10/30/2007 8:35 AM EDT

Activity: 071030083501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Michael Harvey\Buddie Chandler **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071030083502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Michael Harvey\Buddie Chandler **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4978	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	79.27065 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	31.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	115.66683 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	111.34599 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	47.0505 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	27.50071 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	99.60284 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	64.6721 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		4/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	114.61398 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	23.2662 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	301.57053 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	281.82293 µeq/L	Detected and Quantified	F	Actual				12/1/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.93452	Detected and Quantified	F	Actual				12/1/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT56 **Visit Date:** 1/25/2007 12:30 PM EST
Visit Comment: MIKE HARVEY //Cold, snow on ground, partly cloudy. Cold, snowy.

Activity: 070125123001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.4439	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	1.74651 µeq/L	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	14.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/6/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	22.59192 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	43.9523 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	14.27326 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	15.4706 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	69.172 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	3.95249 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	77.94811 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	13.70276 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N						
T_AL_TC_Grab	34.209 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/11/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	96.29458 µeq/L	Detected and Quantified	F	Actual				2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	97.34987 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	1.01096	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 07012512300F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	3 °C	Detected and Quantified	F	Actual				1/25/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT56 **Visit Date:** 4/25/2007 11:30 AM EDT

Activity: 070425113001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Michael Harvey\Steve Rutkowski **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	5 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070425113002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Michael Harvey\Steve Rutkowski **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.4077	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	0.49555 µeq/L	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	15 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	20.7758 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	40.92317 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	13.76022 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	18.36574 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	71.09019 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.18277 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	3.45342 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	78.49194 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	13.17143 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
T_AL_TC_Grab	34.25153 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/17/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												
SBC_IC2_GRAB	94.0077 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	95.61234 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	1.01707	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT56 **Visit Date:** 7/25/2007 1:30 PM EDT

Activity: 070725133001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Michael Harvey **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	16.0 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070725133002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Michael Harvey **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7024	Detected and Quantified	F	Actual				8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	8.84784 µeq/L	Detected and Quantified	F	Actual				8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	13.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	23.6142 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	46.05464 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	16.50249 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	20.51474 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	90.3872 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	5.00246 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	70.39256 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	15.81417 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	11.89208 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	8/21/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	106.69257 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	100.05703 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93781	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT56 **Visit Date:** 10/30/2007 12:05 PM EDT

Activity: 071030120501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Michael Harvey\Buddie Chandler **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								

water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	NORMAL	Detected and Quantified	F	Actual
general_observation		Detected and Quantified	F	Actual

Activity: 071030120502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Michael Harvey\Buddie Chandler **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.6102	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	5.95755 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	27.3978 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	55.69079 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	18.87836 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	24.26734 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	85.53904 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	33.65346 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	62.98645 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	20.56234 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

T_AL_TC_Grab	8.06426 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	9/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	126.24079 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	123.1598 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97559	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT57 **Visit Date:** 1/25/2007 11:30 AM EST

Visit Comment: MIKE HARVEY
//
cloudy.
Snowy, overcast, cool.
//Cold, snow on ground, partly

Activity: 070125113001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2426	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	19.52134 µeq/L	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	20.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/6/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	50.4887 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	65.74516 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	23.55864 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_Grab	16.82459 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	73.87 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	14.97282 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	103.9555 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	15.39496 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	156.62359 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	153.84462 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.98226	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07012511300F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	3 °C	Detected and Quantified	F	Actual				1/25/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT57 **Visit Date:** 4/25/2007 2:10 PM EDT

Activity: 070425141001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Michael Harvey\Steve Rutkowski **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13 °C	Detected and Quantified	F	Actual								

weather	1	Detected and Quantified	F	Actual
water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	NORMAL	Detected and Quantified	F	Actual
days_since_precip	5 days	Detected and Quantified	F	Actual

Activity: 070425141002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Michael Harvey\Steve Rutkowski **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2961	Detected and Quantified	F	Actual								
ANC_Metrohm_Grab	19.43573 µeq/L	Detected and Quantified	F	Actual								
Cond_VWR_Manual_Grab	20.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	50.14614 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	63.06333 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	23.55094 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	20.34525 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	78.07342 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	10.48372 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	104.1031 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	14.67748 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	157.11216 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	148.70003 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.94646	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Activity: 070425141002 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Michael Harvey\Steve Rutkowski **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.3008	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	19.13516 µeq/L	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	20.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	49.50281 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	63.03847 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	23.58823 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	20.37527 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	78.46178 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	11.04149 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	103.99233 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	14.69176 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	156.51128 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	148.86074 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.95112	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT57 **Visit Date:** 7/30/2007 9:30 AM EDT

Activity: 070730093001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Joe Emswiler **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.0 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070730093002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Joe Emswiler **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4866	Detected and Quantified	F	Actual				8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	50.77064 µeq/L	Detected and Quantified	F	Actual				8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	21.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	66.52286 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	84.64343 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	30.41916 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	28.44079 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	88.27586 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.58238 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	38.83531 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	90.82309 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	17.26852 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	210.60862 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	197.69756 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9387	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT57 **Visit Date:** 10/30/2007 11:05 AM EDT

Activity: 071030110501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Michael Harvey\Buddie Chandler **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								

flow_streamStage	NORMAL	Detected and Quantified	F	Actual
general_observation		Detected and Quantified	F	Actual

Activity: 071030110502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Michael Harvey\Buddie Chandler **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4667	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	33.28883 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	26.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	75.46752 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	96.19669 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	33.61918 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	27.8936 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	94.90777 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	76.41531 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		4/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	94.27742 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	25.14197 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	233.18349 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SAA_MET_IC2_GRAB	229.12353 µeq/L	Detected and Quantified	F	Actual				12/1/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.98259	Detected and Quantified	F	Actual				12/1/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: Shenandoah National Park
Project ID: VTSSS **Station ID:** VT58 **Visit Date:** 1/29/2007 3:15 PM EST
Visit Comment: DAVID DEMAREST
//
Few snow squalls //Clear, cold

Activity: 070129151501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6852	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	72.1649 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	46.44118 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	29.3735 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	57.24993 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.2827 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	146.844 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	39.01525 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	22.27532 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	140.35381 µeq/L	Detected and Quantified	F	Actual				2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	133.49597 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.95114	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 07012915150F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	2 °C	Detected and Quantified	F	Actual				1/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: VTSSS **Station ID:** VT58 **Visit Date:** 4/25/2007 2:15 PM EDT

Activity: 070425141501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	8 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070425141502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8485	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	83.46163 µeq/L	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	53.05967 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	32.05422 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	61.33929 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.07622 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	142.53311 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	43.51364 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.53479 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	156.5359 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	148.55056 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.94899	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: VTSSS **Station ID:** VT58 **Visit Date:** 7/30/2007 3:00 PM EDT

Activity: 070730150001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	21.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	INTERSTITIAL	Detected and Quantified	F	Actual								

Activity: 070730150002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9957	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	133.40855 µeq/L	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	76.44214 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	44.68038 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	76.00824 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	13.11867 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	173.16351 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	2.71313 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	33.07373 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.24513 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	210.25593 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	190.44054 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.90576	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: VTSSS **Station ID:** VT58 **Visit Date:** 10/29/2007 2:30 PM EDT

Activity: 071029143001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** David Demarest **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071029143002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** David Demarest **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8994	Detected and Quantified	F	Actual				10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	111.31179 µeq/L	Detected and Quantified	F	Actual				10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	75.0171 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	45.76414 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	70.18406 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	13.0048 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	167.91614 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	47.70995 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	28.60312 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	203.9766 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	187.66536 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.92003	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: Shenandoah National Park
Project ID: VTSSS **Station ID:** VT61 **Visit Date:** 1/29/2007 1:30 PM EST
Visit Comment: DAVID DEMAREST
// //Clear, cold
Few snow squalls

Activity: 070129133001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.1465	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	237.66123 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	38.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	143.31096 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	133.51047 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	92.22451 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.04516 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	234.243 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	11.45398 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	78.35385 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	31.46788 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	376.0976 µeq/L	Detected and Quantified	F	Actual				2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	358.93694 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.95437	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 070129133001 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.2764	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	237.03828 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	39.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	144.07425 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	133.70937 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	92.44567 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.00774 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	231.188 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NO3_Ions_Grab	8.30204 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	78.72217 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	31.49758 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	377.24353 µeq/L	Detected and Quantified	F	Actual				2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	355.56007 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.94252	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 07012913300F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	0.9 °C	Detected and Quantified	F	Actual				1/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: VTSSS **Station ID:** VT61 **Visit Date:** 4/25/2007 4:15 PM EDT

Activity: 070425161501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	8 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070425161502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.4916	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	268.18437 µeq/L	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	41.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	154.25561 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	136.22105 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	105.69537 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.45147 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	250.35692 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.28072 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	84.97343 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	31.42515 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	406.90422 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	384.62345 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.94524	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: VTSSS **Station ID:** VT61 **Visit Date:** 7/30/2007 4:20 PM EDT

Activity: 070730162001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	20.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	INTERSTITIAL	Detected and Quantified	F	Actual								

Activity: 070730162002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.4694	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	433.7439 µeq/L	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	45.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	213.5471 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	177.83101 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	139.24954 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	13.1154 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	302.14011 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	51.70444 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	28.73349 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	543.74955 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	514.22233 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.9457	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: VTSSS **Station ID:** VT61 **Visit Date:** 10/29/2007 1:20 PM EDT

Activity: 071029132001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** David Demarest **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071029132002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** David Demarest **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.4186	Detected and Quantified	F	Actual				10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	376.14082 µeq/L	Detected and Quantified	F	Actual				10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	48.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	206.41273 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	181.87454 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	132.32261 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/25/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
K_Ions_Grab	13.70074 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	289.86892 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: Y	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	90.06443 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	47.80054 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	534.31712 µeq/L	Detected and Quantified	F	Actual				12/1/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	514.04629 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.96206	Detected and Quantified	F	Actual				12/1/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: VTSSS **Station ID:** VT62 **Visit Date:** 1/29/2007 2:38 PM EST
Visit Comment: DAVID DEMAREST
// //Clear, cold
Few snow squalls

Activity: 070129143801 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.718	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	85.56644 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	50.32212 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	38.33075 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	62.44513 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	8.07624 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	162.863 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	22.2477 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	24.84108 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	159.18074 µeq/L	Detected and Quantified	F	Actual				2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	132.69572 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.83362	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 07012914380F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	1.4 °C	Detected and Quantified	F	Actual				1/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: VTSSS **Station ID:** VT62 **Visit Date:** 4/25/2007 2:40 PM EDT

Activity: 070425144001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	8 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070425144002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.8438	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	92.35721 µeq/L	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	54.23744 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	37.90006 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	65.48696 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	10.70536 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	162.3546 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	40.43892 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	25.00778 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	168.33632 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	157.84441 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.93767	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: Shenandoah National Park

Project ID: VTSSS **Station ID:** VT62 **Visit Date:** 7/30/2007 3:45 PM EDT

Activity: 070730154501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	20.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

Activity: 070730154502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.0397	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	144.76843 µeq/L	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	73.6608 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	50.29558 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	77.59744 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	12.39168 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	186.02738 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: Y	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	26.67101 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	24.05721 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	213.952 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	195.53715 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.91393	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: VTSSS **Station ID:** VT62 **Visit Date:** 10/29/2007 1:55 PM EDT

Activity: 071029135501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** David Demarest **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071029135502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** David Demarest **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9325	Detected and Quantified	F	Actual				10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	117.53233 µeq/L	Detected and Quantified	F	Actual				10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	20.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	75.09734 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	53.6862 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	71.81588 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	14.60523 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	178.17795 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	0.70835 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	43.37902 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	31.83559 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	215.21115 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	193.45529 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.89891	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT63 **Visit Date:** 1/25/2007 1:20 PM EST
Visit Comment: MARVIN GILBERT
// //Partly cloudy.
1/2" sleet on 1/21/07; partly cloudy other days.

Activity: 070125132001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6914	Detected and Quantified	F	Actual				1/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	73.77953 µeq/L	Detected and Quantified	F	Actual				1/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	14.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		1/31/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	48.30525 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	18.90121 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	54.36266 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	5.78325 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	138.212 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	23.89533 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.20116 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	127.35887 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	118.91652 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93371	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT63 **Visit Date:** 4/25/2007 8:56 AM EDT

Visit Comment: Multiple forest fires in area between here and Little Piney river and Little Friar mountain

Activity: 070425085601 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Marvin Gilbert **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	7 days	Detected and Quantified	F	Actual								

Activity: 070425085602 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Marvin Gilbert **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7346	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	82.23738 µeq/L	Detected and Quantified	F	Actual				5/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	14.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	5/2/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	52.28865 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	20.45765 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	55.60155 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	6.67275 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	132.46523 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	24.48102 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	20.49754 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	135.0271 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	127.25644 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94245	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT63 **Visit Date:** 7/25/2007 3:15 PM EDT

Activity: 070725151501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marvin Gilbert **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.0 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070725151502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Marvin Gilbert **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9533	Detected and Quantified	F	Actual				8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	113.6887 µeq/L	Detected and Quantified	F	Actual				8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	71.42559 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	26.33792 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	65.54546 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	9.7116 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	150.22242 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NO3_Ions_Grab	2.57664 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	20.85718 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	21.46852 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	173.02707 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	158.59104 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.91657	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT63 **Visit Date:** 10/29/2007 3:45 PM EDT

Activity: 071029154501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Marvin Gilbert **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071029154502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Marvin Gilbert **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.1285	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	102.65619 µeq/L	Detected and Quantified	F	Actual			11/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	17.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	11/6/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	68.77793 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	28.28047 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	65.62655 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	13.29555 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	148.33798 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	29.98109 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	27.94873 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	4/10/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	175.987 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	160.62651 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.91272	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Activity: 071029154502 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1
Custody ID: **Person(s):** Marvin Gilbert **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.36	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	106.88727 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	17 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	68.06189 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	27.91121 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	65.64908 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	13.06776 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	147.94032 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	0.52158 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	29.46993 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	27.70316 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	174.69644 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	164.58194 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.9421	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT64 **Visit Date:** 1/29/2007 10:50 AM EST
Visit Comment: H. HUFFMAN
// //Cold, clear.
Cold, snow showers.

Activity: 070129105001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7836	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	59.03248 µeq/L	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	10.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	35.29074 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	13.32943 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	40.62895 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	4.93058 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	108.713 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	12.03004 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	20.28042 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	94.1862 µeq/L	Detected and Quantified	F	Actual				2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	91.38344 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.97024	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 07012910500F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	1 °C	Detected and Quantified	F	Actual				1/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT64 **Visit Date:** 5/3/2007 9:30 AM EDT

Activity: 070503093001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	0 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070503093002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5791	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	63.99515 µeq/L	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	9.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	39.46077 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	13.90835 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	38.32404 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.11742 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	89.05952 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	12.88309 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	17.26396 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	97.81708 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	94.1827 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.96285	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT64 **Visit Date:** 7/25/2007 1:50 PM EDT

Activity: 070725135001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070725135002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7332	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	75.56471 µeq/L	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	10.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	43.37579 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	14.72287 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	41.99179 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_Grab	5.70366 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	109.80423 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	9.37447 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	18.63335 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	105.80061 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	103.61303 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.97932	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT64 **Visit Date:** 10/25/2007 10:24 AM EDT

Activity: 071025102401 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.0 °C	Detected and Quantified	F	Actual								
weather	6	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071025102402 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.578	Detected and Quantified	F	Actual				11/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	66.00991 µeq/L	Detected and Quantified	F	Actual				11/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	13.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	59.56758 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	20.70498 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	42.47344 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	17.34616 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	98.44178 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	23.09995 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	30.78261 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	140.09866 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	119.93297 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.85606	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT65 **Visit Date:** 1/29/2007 10:45 AM EST
Visit Comment: H. HUFFMAN
//
Cold, show showers. //Cold, clear.

Activity: 070129104501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5599	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	52.54597 µeq/L	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	11.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	41.01181 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	13.56835 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	44.03367 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	4.5056 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	117.03 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	2.4856 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	22.72539 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/29/2007			
Dilution: N	*Recovery:* N	*Correction:* N									
Cl_Ions_Grab	18.22791 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/29/2007			
Dilution: N	*Recovery:* N	*Correction:* N									
SBC_IC2_GRAB	103.12593 µeq/L	Detected and Quantified	F	Actual				2/6/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
SAA_MET_IC2_GRAB	95.98487 µeq/L	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									
IONRATIO_MET_IC2_GRAB	0.93075	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Activity: 07012910450F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	1 °C	Detected and Quantified	F	Actual				1/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT65 **Visit Date:** 5/3/2007 8:55 AM EDT

Activity: 070503085501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14 °C	Detected and Quantified	F	Actual								
weather	6	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	0 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070503085502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4927	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	65.13603 µeq/L	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	11.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	48.33289 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	15.09454 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	46.53372 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.66674 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	112.43196 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	23.56643 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	17.75203 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	116.63439 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	106.49499 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.91307	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 070503085502 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4787	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	66.27295 µeq/L	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	11.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	48.13613 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	15.17471 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	46.70934 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	6.66938 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	112.03927 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	23.47437 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	17.35179 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	116.69606 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	107.13961 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.91811	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT65 **Visit Date:** 7/25/2007 1:35 PM EDT

Activity: 070725133501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	17.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070725133502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.689	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	81.4157 µeq/L	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	14.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	65.83893 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Mg_Ions_Grab	20.36207 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	55.31642 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	7.32285 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	139.7561 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	4.34582 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	13.11113 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	20.86021 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	18.22008 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	153.18609 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	133.60712 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.87219	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT65 **Visit Date:** 10/25/2007 10:15 AM EDT

Activity: 071025101501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	6	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								

flow_streamStage	NORMAL	Detected and Quantified	F	Actual
general_observation		Detected and Quantified	F	Actual

Activity: 071025101502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2334	Detected and Quantified	F	Actual				11/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	68.96502 µeq/L	Detected and Quantified	F	Actual				11/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	14.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	59.5865 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	19.53778 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	55.81569 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	13.64062 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	127.53567 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	2.24323 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	29.77159 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	27.52274 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	150.82382 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	126.29985 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.8374	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: VTSSS **Station ID:** VT66 **Visit Date:** 1/30/2007 10:20 AM EST

Visit Comment: JIM ATKINSON
// //Clear, cold
Few snow flurries

Activity: 070130102001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9547	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	129.8551 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	25.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	100.24489 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	79.59076 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	54.57496 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	3.38229 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	140.17 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	17.32158 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	50.8603 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	31.16849 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	237.7994 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	229.20547 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.96386	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07013010200F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	2 °C	Detected and Quantified	F	Actual				1/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: VTSSS **Station ID:** VT66 **Visit Date:** 4/25/2007 1:10 PM EDT

Activity: 070425131001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	15 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	8 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070425131002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.0605	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	150.22881 µeq/L	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	27.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	108.58424 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	81.99827 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	61.72679 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	4.87131 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	147.67643 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	2.46698 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	53.94157 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	30.38756 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	257.18711 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	237.02492 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.9216	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 070425131002 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** James Atkinson **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.0824	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	147.68164 µeq/L	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	27.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	109.16103 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	81.92202 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	61.44441 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	4.86765 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	146.29098 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	54.64454 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	30.2274 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	257.40161 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	232.59408 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.90362	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park

Project ID: VTSSS **Station ID:** VT66 **Visit Date:** 7/30/2007 1:34 PM EDT

Activity: 070730133401 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	20.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	INTERSTITIAL	Detected and Quantified	F	Actual								

Activity: 070730133402 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	7.1544	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	211.41518 µeq/L	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	29 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	139.05407 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	102.47465 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Na_Ions_Grab	75.05031 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	5.13345 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	166.54007 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	1.06657 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	13.75656 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	36.97903 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	43.41635 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	322.77905 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	305.56712 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94668	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: VTSSS **Station ID:** VT66 **Visit Date:** 10/29/2007 3:45 PM EDT

Activity: 071029154501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** David Demarest **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.5 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071029154502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** David Demarest **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9183	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	199.65577 µeq/L	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	29.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	135.08193 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	103.11339 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	69.68369 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	5.59615 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	158.49492 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	0.88271 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	51.75542 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	43.79947 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/11/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	313.48166 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	296.09337 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.94453	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT67 **Visit Date:** 1/25/2007 1:00 PM EST

Visit Comment: VDGIF //
//Cold & sunny
Cold & cloudy

Activity: 070125130001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4918	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	36.12397 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	14.78291 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	19.29306 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	31.5956 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	4.63319 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	85.374 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	14.26685 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	20.71037 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	70.31126 µeq/L	Detected and Quantified	F	Actual				2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	71.14169 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	1.01181	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT67 **Visit Date:** 4/24/2007 7:30 AM EDT

Activity: 070424073001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
days_since_precip	8 days	Detected and Quantified	F	Actual								

Activity: 070424073002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4385	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	42.25552 µeq/L	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	9.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	5/1/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	19.97673 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	23.15479 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	35.15543 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	5.35597 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	82.3494 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	3/31/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	18.06916 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	19.18071 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	83.64942 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	79.54589 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95094	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

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Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT67 **Visit Date:** 7/25/2007 4:30 PM EDT

Activity: 070725163001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	6	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070725163002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4475	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	50.62588 µeq/L	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	9.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	27.14728 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	25.58554 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	36.09211 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	7.31676 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	90.01219 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	17.81797 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	18.55703 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	96.14819 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	87.04138 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.90528	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT67 **Visit Date:** 10/26/2007 9:30 AM EDT

Visit Comment: Rain last several days

Activity: 071026093001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.5 °C	Detected and Quantified	F	Actual								
weather	8	Detected and Quantified	F	Actual								
water_turbidity	MODERATE	Detected and Quantified	F	Actual								
flow_streamStage	ABOVE NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071026093002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No
Activity Comment: No monomeric Al analysis because no aluminum aliquot was poured off since historically pH was above 6.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.3229	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	5.40775 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	12.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	27.42677 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	28.45957 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	22.74311 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	9.68617 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	57.70433 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	0.62398 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	50.96025 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.22224 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	88.32212 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	78.21422 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.88556	Detected and Quantified	F	Actual				4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N									

Organization: Shenandoah National Park
Project ID: VTSSS **Station ID:** VT75 **Visit Date:** 1/30/2007 9:45 AM EST
Visit Comment: JIM ATKINSON
//
Few snow flurries //Clear, cold

Activity: 070130094501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9177	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	116.75617 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	25.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	96.93443 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	75.87695 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	52.70423 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	3.37879 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	131.024 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	18.41277 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

SO4_Ions_Grab	53.35807 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L			8/29/2007			
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	32.20528 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L			8/29/2007			
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	228.9009 µeq/L	Detected and Quantified	F	Actual					2/6/2008			
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	220.73229 µeq/L	Detected and Quantified	F	Actual					4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N										
IONRATIO_MET_IC2_GRAB	0.96431	Detected and Quantified	F	Actual					4/23/2008			
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 07013009450F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	2 °C	Detected and Quantified	F	Actual				1/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: VTSSS **Station ID:** VT75 **Visit Date:** 4/25/2007 1:35 PM EDT

Activity: 070425133501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.5 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	8 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070425133502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9973	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	130.92599 µeq/L	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	25.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	100.44584 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	74.78972 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	56.11498 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	4.73567 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	133.84546 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	2.59699 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	51.66313 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	30.4431 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	236.09271 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	215.62921 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.91332	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: Shenandoah National Park
Project ID: VTSSS **Station ID:** VT75 **Visit Date:** 7/30/2007 2:20 PM EDT

Activity: 070730142001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	20.0 °C	Detected and Quantified	F	Actual								
weather	8	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	INTERSTITIAL	Detected and Quantified	F	Actual								

Activity: 070730142002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** James Atkinson **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.9327	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	213.75989 µeq/L	Detected and Quantified	F	Actual				8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	29.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	145.57761 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	105.8215 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	66.99259 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	5.06703 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/20/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	159.92477 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/9/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	2.42945 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	17.5309 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	37.95145 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	37.00274 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/20/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	325.88818 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	306.24498 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93972	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: Shenandoah National Park

Project ID: VTSSS **Station ID:** VT75 **Visit Date:** 10/29/2007 3:10 PM EDT

Activity: 071029151001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** David Demarest **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071029151002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** David Demarest **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.69	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	156.33868 µeq/L	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	25.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	121.76661 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	90.47141 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	57.07773 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	5.38198 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	142.97383 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/25/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	59.74031 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	41.72847 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	274.70423 µeq/L	Detected and Quantified	F	Actual				12/1/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	257.84796 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.93864	Detected and Quantified	F	Actual				12/1/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Activity: 071029151002 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** David Demarest **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.7295	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	157.80392 µeq/L	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	25.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	121.93979 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	90.59867 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	56.93841 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	5.49403 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	142.57684 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	58.45521 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	41.83496 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		4/10/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	274.9774 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	258.13459 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93875	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT76 **Visit Date:** 1/29/2007 2:40 PM EST
Visit Comment: K. HICKMAN
// //Cold & clear.
Cold & clear with some partly cloudy days.

Activity: 070129144001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.8776	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	9.70977 µeq/L	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	12.2 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	11.34964 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	28.18587 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	20.88526 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	23.75362 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	94.321 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N						
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	54.83248 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	17.71637 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N						
T_AL_TC_Grab	6.411 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/11/2007
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	84.18089 µeq/L	Detected and Quantified	F	Actual				2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	82.29912 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.97765	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 07012914400F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	4.4 °C	Detected and Quantified	F	Actual				1/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT76 **Visit Date:** 5/4/2007 2:10 PM EDT

Activity: 070504141001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13 °C	Detected and Quantified	F	Actual								
weather	8	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								

flow_streamStage	NORMAL	Detected and Quantified	F	Actual
days_since_precip	0 days	Detected and Quantified	F	Actual

Activity: 070504141002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.8832	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	13.48652 µeq/L	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	10.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	11.51701 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	27.33685 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	21.60645 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	28.89819 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	102.12568 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	53.53564 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	18.54555 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

T_AL_TC_Grab	8.38551 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/17/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	89.365 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	85.60821 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95796	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT76 **Visit Date:** 7/25/2007 12:05 PM EDT

Visit Comment: Recent wildfire activity above and around site.

Activity: 070725120501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Herbie Huffman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.0 °C	Detected and Quantified	F	Actual								
weather	8	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070725120502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Herbie Huffman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.0836	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	22.08625 µeq/L	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cond_VWR_Manual_Grab	11.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	7/31/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	12.39069 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	29.0638 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	23.55467 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	32.38776 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	125.42856 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	1.32838 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	45.67026 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	21.44326 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	97.40342 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	90.52815 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.92941	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT76 **Visit Date:** 10/29/2007 12:05 PM EDT

Activity: 071029120501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071029120502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7391	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	10.65742 µeq/L	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	11.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	11.85313 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	27.61952 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	24.77207 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	28.98076 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	113.35914 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	55.73954 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	22.09705 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	9.21245 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	9/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	93.23198 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	88.53451 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94962	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT77 **Visit Date:** 1/29/2007 1:10 PM EST
Visit Comment: K. HICKMAN
//
Cold & clear with some partly cloudy days.
//Cold & clear.

Activity: 070129131001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4733	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	31.16954 µeq/L	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	14.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										

Ca_Ions_Grab	22.3054 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	39.53926 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	33.8499 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	22.82839 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	96.197 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	66.25587 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	18.86694 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	118.52945 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	116.33285 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.98147	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07012913100F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	2.8 °C	Detected and Quantified	F	Actual				1/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT77 **Visit Date:** 5/2/2007 1:15 PM EDT

Activity: 070502131501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	19 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	6 days	Detected and Quantified	F	Actual								

Activity: 070502131502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5761	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	40.88297 µeq/L	Detected and Quantified	F	Actual				5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	13.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/10/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	22.70494 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	39.41634 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	34.91946 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	30.55336 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		1/16/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	100.08816 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	61.56254 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	18.92492 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	1/16/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	127.6006 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	121.41093 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.95149	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT77 **Visit Date:** 7/25/2007 8:50 AM EDT

Activity: 070725085001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Herbie Huffman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.0 °C	Detected and Quantified	F	Actual								
weather	8	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070725085002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Herbie Huffman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.5025	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

ANC_Metrohm_Grab	76.56909 µeq/L	Detected and Quantified	F	Actual			7/31/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cond_VWR_Manual_Grab	16.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm	7/31/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Ca_Ions_Grab	31.71872 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	57.67921 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	44.62779 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	32.57273 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	110.38869 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	59.3452 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	19.66265 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/18/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	166.60495 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	155.61744 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93405	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT77 **Visit Date:** 10/29/2007 10:38 AM EDT

Activity: 071029103801 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9.0 °C	Detected and Quantified	F	Actual								
weather	0	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071029103802 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.3161	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	40.88424 µeq/L	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.7 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	28.57456 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	50.84959 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	43.86768 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	31.86984 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	111.61331 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N						
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SO4_Ions_Grab	81.12732 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N						
Cl_Ions_Grab	23.34244 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SBC_IC2_GRAB	155.16817 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
SAA_MET_IC2_GRAB	145.3945 µeq/L	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						
IONRATIO_MET_IC2_GRAB	0.93701	Detected and Quantified	F	Actual				4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N						

Activity: 071029103802 **Activity Type:** Quality Control Sample-Field Replicate **Activity Depth:** **Relative Depth:** **Replicate #:** 1

Custody ID: **Person(s):** Kenneth Hickman **QC Sample?:** Yes

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.2693	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	41.1962 µeq/L	Detected and Quantified	F	Actual				11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.9 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	29.35046 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	51.0961 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	43.82559 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	31.86019 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/28/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SiO2_TC_Grab	112.0012 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	81.02091 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	23.31762 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/28/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	156.13884 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	145.57523 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93234	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT78 **Visit Date:** 1/29/2007 11:00 AM EST

Visit Comment: VDGIF //
//Very cold, sunny
Snow, ice, freezing rain, wind

Activity: 070129110001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.1027	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-5.73125 µeq/L	Detected and Quantified	F	Actual				2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	14.1 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/2/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										

Ca_Ions_Grab	26.07057 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	24.15247 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	11.0072 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	4.96634 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	53.718 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	9/13/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.2139 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	4.02012 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	60.52952 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	11.14989 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	82.983 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
O_AL_TC_Grab	17.188 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	66.41048 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	69.96828 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	1.05357	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT78 **Visit Date:** 4/24/2007 1:55 PM EDT

Activity: 070424135501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	11.0 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	0 days	Detected and Quantified	F	Actual								

Activity: 070424135502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.0675	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	-6.60532 µeq/L	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	13.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	24.59301 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	22.30543 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	10.91075 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	5.81135 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	50.19426 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	60.22277 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	10.80473 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	11/15/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	70.46222 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/17/2007
Dilution: Y	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
O_AL_TC_Grab	20.36344 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/18/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	63.62704 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	64.46268 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	1.01313	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT78 **Visit Date:** 7/25/2007 9:30 AM EDT

Activity: 070725093001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	6	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070725093002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.242	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	2.95702 µeq/L	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	11.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	29.32894 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	25.48239 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	15.76853 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	11.24796 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	55.94528 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		6/24/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	0.21668 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	62.80961 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	11.51523 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/18/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
T_AL_TC_Grab	64.67287 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		8/21/2007				
Dilution: Y	*Recovery:* N	*Correction:* N										

Detect/Quant Lim Description: set 12/17/07

O_AL_TC_Grab	41.58105 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	8/22/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	82.0445 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	77.32236 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.94244	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT78 **Visit Date:** 10/26/2007 12:30 PM EDT

Activity: 071026123001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.5 °C	Detected and Quantified	F	Actual								
weather	5	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 071026123002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7013	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	18.51633 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	16.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	28.66765 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	30.80154 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	22.51926 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	49.51892 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	66.31404 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	7/15/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	1.87908 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	76.62483 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	19.2661 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/27/2008
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	61.5013 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	9/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
O_AL_TC_Grab	57.26633 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	11/5/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	131.51387 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	116.28634 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.88421	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

NPSTORET Results with Comments

Filtered Results

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT80 **Visit Date:** 1/26/2007 11:30 AM EST
Visit Comment: HOLDEN MASON
// //Air temp-3C; partly cloudy/calm;
coldest yet this year.
Snow-2"-4"; colder temp.

Activity: 070126113001 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.7481	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	7.88064 µeq/L	Detected and Quantified	F	Actual				2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	18 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/1/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	41.72225 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	58.67336 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	17.79959 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	12.00282 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	83.664 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	4.73312 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	101.62566 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		8/28/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Cl_Ions_Grab	15.72243 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/28/2007
Dilution: N	*Recovery:* N	*Correction:* N					
T_AL_TC_Grab	35.694 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/12/2007
Dilution: N	*Recovery:* N	*Correction:* N					
O_AL_TC_Grab	12.455 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/23/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	130.20452 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	129.96185 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.99814	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07012611300F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	1 °C	Detected and Quantified	F	Actual				1/26/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT80 **Visit Date:** 4/25/2007 12:00 PM EDT

Activity: 070425120001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Thomas Holland **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	10 °C	Detected and Quantified	F	Actual								
weather	2	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	NORMAL	Detected and Quantified	F	Actual								
days_since_precip	5 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070425120002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Thomas Holland **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.4276	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	1.44019 µeq/L	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	19 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	42.71256 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	53.96585 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	16.00839 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	14.67091 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	77.87926 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	2.43499 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	109.60807 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	15.47105 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
T_AL_TC_Grab	77.05327 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l		7/17/2007				
Dilution: Y	*Recovery:* N	*Correction:* N										
Detect/Quant Lim Description: set 12/17/07												

O_AL_TC_Grab	29.29641 µg/l	Detected and Quantified	F	Actual	1.524 ug/l	4.845 ug/l	7/23/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Detect/Quant Lim Description: set 12/17/07							
SBC_IC2_GRAB	127.36421 µeq/L	Detected and Quantified	F	Actual			3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	128.9543 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	1.01248	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT80 **Visit Date:** 7/30/2007 10:55 AM EDT

Activity: 070730105501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Holden Mason **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	18.0 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070730105502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Holden Mason **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.3747	Detected and Quantified	F	Actual				8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	33.01679 µeq/L	Detected and Quantified	F	Actual				8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	12.6 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		8/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Ca_Ions_Grab	35.07803 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Mg_Ions_Grab	50.10756 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Na_Ions_Grab	24.63288 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
K_Ions_Grab	7.03208 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	103.16288 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	0.19481 µeq/L	Detected and Quantified	F	Actual	0.013 ueq/L	0.04 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	63.50122 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	13.34928 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	117.04536 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	109.90779 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.93902	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT80 **Visit Date:** 10/25/2007 11:30 AM EDT

Activity: 071025113001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Holden Mason **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	12.5 °C	Detected and Quantified	F	Actual								

weather	5	Detected and Quantified	F	Actual
water_turbidity	NONE	Detected and Quantified	F	Actual
flow_streamStage	LOW	Detected and Quantified	F	Actual
general_observation		Detected and Quantified	F	Actual

Activity: 071025113002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Holden Mason **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.3757	Detected and Quantified	F	Actual				10/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	43.41356 µeq/L	Detected and Quantified	F	Actual				10/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	15.8 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		10/30/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	43.44335 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	62.5625 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	26.53174 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	17.47079 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	89.75728 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	1.51027 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	72.1807 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	18.90619 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

SBC_IC2_GRAB	150.01488 µeq/L	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				
SAA_MET_IC2_GRAB	136.01072 µeq/L	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				
IONRATIO_MET_IC2_GRAB	0.90665	Detected and Quantified	F	Actual		4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N				

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT81 **Visit Date:** 2/5/2007 12:25 PM EST

Visit Comment: VDGIF //
//Very cold, very windy, sunny.
Snow, sleet, freezing rain, wind, cold.

Activity: 070205122501 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.6227	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	39.37628 µeq/L	Detected and Quantified	F	Actual				2/16/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	8.3 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		2/8/2007				
Dilution: N	*Recovery:* N	*Correction:* Y										
Ca_Ions_Grab	16.26057 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	19.16044 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	34.88158 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	4.33911 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		8/29/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	88.279 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		9/13/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	0.90766 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	15.30227 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	19.71807 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	8/29/2007
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	74.6482 µeq/L	Detected and Quantified	F	Actual			2/6/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	75.30428 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	1.00879	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Activity: 07020512250F **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	1 °C	Detected and Quantified	F	Actual				2/5/2007				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT81 **Visit Date:** 4/24/2007 7:35 AM EDT

Activity: 070424073501 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	9 °C	Detected and Quantified	F	Actual								
weather	1	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
days_since_precip	8 days	Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 070424073502 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.436	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	42.42607 µeq/L	Detected and Quantified	F	Actual				5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	9.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		5/1/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	19.61434 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	23.26703 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	35.46613 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	5.40709 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	81.37561 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		3/31/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	18.14219 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	19.06705 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		11/15/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	83.76109 µeq/L	Detected and Quantified	F	Actual				3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	79.67581 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_GRAB	0.95123	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

Organization: University of Virginia non-NPS watersheds
Project ID: VTSSS **Station ID:** VT81 **Visit Date:** 7/25/2007 4:30 PM EDT

Activity: 070725163001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	14.0 °C	Detected and Quantified	F	Actual								
weather	6	Detected and Quantified	F	Actual								
water_turbidity	NONE	Detected and Quantified	F	Actual								
flow_streamStage	LOW	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

Activity: 070725163002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	6.4538	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	50.15095 µeq/L	Detected and Quantified	F	Actual				7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	9.5 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		7/31/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	26.73689 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	25.72258 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	36.16562 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/19/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

K_Ions_Grab	7.28587 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SiO2_TC_Grab	90.20517 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L	6/24/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
NO3_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.081 ueq/L	0.258 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SO4_Ions_Grab	17.52713 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
Cl_Ions_Grab	18.45856 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L	3/19/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SBC_IC2_GRAB	95.91746 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
SAA_MET_IC2_GRAB	86.17714 µeq/L	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					
IONRATIO_MET_IC2_GRAB	0.89845	Detected and Quantified	F	Actual			4/23/2008
Dilution: N	*Recovery:* N	*Correction:* N					

Organization: University of Virginia non-NPS watersheds

Project ID: VTSSS **Station ID:** VT81 **Visit Date:** 10/26/2007 9:30 AM EDT

Visit Comment: Rain last several days

Activity: 071026093001 **Activity Type:** Field Msr/Obs **Activity Depth:** **Relative Depth:** **Replicate #:**

Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
Temp_Water_C	13.5 °C	Detected and Quantified	F	Actual								
weather	8	Detected and Quantified	F	Actual								
water_turbidity	MODERATE	Detected and Quantified	F	Actual								
flow_streamStage	ABOVE NORMAL	Detected and Quantified	F	Actual								
general_observation		Detected and Quantified	F	Actual								

NPSTORET Results with Comments

Filtered Results

Activity: 071026093002 **Activity Type:** Sample-Routine **Activity Depth:** **Relative Depth:** **Replicate #:**
Custody ID: **Person(s):** Clifford Kirk **QC Sample?:** No
Activity Comment: No monomeric aluminum analysis because no Al aliquot poured off since historically pH was above 6.

Local Name	Result	Detection Condition	Value Status	Value Type	Detection Limit	Lower Quant Limit	Upper Quant Limit	Analysis Date/Time	Prec.	Con. Level	Bias	#
pH_Metrohm_Grab	5.2947	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
ANC_Metrohm_Grab	5.02626 µeq/L	Detected and Quantified	F	Actual				11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Cond_VWR_Manual_Grab	12.4 µS/cm	Detected and Quantified	F	Actual	0.162 uS/cm	0.515 uS/cm		11/6/2007				
Dilution: N	*Recovery:* N	*Correction:* N										
Ca_Ions_Grab	27.17863 µeq/L	Detected and Quantified	F	Actual	0.468 ueq/L	1.488 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Mg_Ions_Grab	28.53764 µeq/L	Detected and Quantified	F	Actual	0.218 ueq/L	0.694 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Na_Ions_Grab	22.83883 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.091 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
K_Ions_Grab	9.67374 µeq/L	Detected and Quantified	F	Actual	0.029 ueq/L	0.092 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SiO2_TC_Grab	57.13107 µmol/L	Detected and Quantified	F	Actual	1.051 umol/L	3.342 umol/L		7/15/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NH4_Ions_Grab	*Non-detect	*Non-detect	F	Actual	0.013 ueq/L	0.04 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
NO3_Ions_Grab	0.68974 µeq/L	Detected and Quantified	F	Actual	0.081 ueq/L	0.258 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SO4_Ions_Grab	51.30397 µeq/L	Detected and Quantified	F	Actual	0.31 ueq/L	0.986 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
Cl_Ions_Grab	21.08706 µeq/L	Detected and Quantified	F	Actual	0.076 ueq/L	0.242 ueq/L		3/27/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SBC_IC2_GRAB	88.23534 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										
SAA_MET_IC2_GRAB	78.10703 µeq/L	Detected and Quantified	F	Actual				4/23/2008				
Dilution: N	*Recovery:* N	*Correction:* N										

IONRATIO_MET_IC2_G RAB	0.88521	Detected and Quantified	F	Actual	4/23/2008

Dilution: N *Recovery:* N *Correction:* N

Results filtered for:
Organization = PEFO: Petrified Forest National Park
SHEN: Shenandoah National Park
UVAVTSSS: University of Virginia non-NPS watersheds
Station = Include Trip QC And All Station Visit Results
Exclude Analytical Groups
Date (>=1/1/2007 and <=12/31/2007)
Value Status <> Rejected

Total Number of Results Detailed: 14879