



WATER-RIGHT DOCKET

Mammoth Cave National Park

Docket No: 6

EATON VALLEY

Supporting Hydro Data

00-00-0000: water analysis

PROVISION. RECORDS, SUBJECT TO REVISION

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

2GW

WATER ANALYSIS

Location Near Mammoth Cave, Kentucky (East) County Edmonson
Source Drilled well (In Eaton Valley) Depth (ft) _____ Diam (in.) _____
Cased to (ft) _____ Date drilled _____ Point of coll. End of pump pipe
Owner National Park Service
Treatment _____ Use _____
WBFB _____ WL 220.6 ft. below Yield _____
Temp (°F) _____ Appear. when coll. Turbid, dark measuring point
Collected July 20, 1961, 5:30 PM By P. G. Malone
Remarks Collected after 8 hours pumping.

	ppm	epm		ppm	epm
Silica (SiO ₂)	10	--	Bicarbonate (HCO ₃)	138	2.26
Aluminum (Al)			Carbonate (CO ₃)	0	.00
Iron (Fe) Total	.97	--			
Manganese (Mn)	.33	--	Sulfate (SO ₄)	626	13.03
			Chloride (Cl)	95	2.68
			Fluoride (F)	3.2	.17
Calcium (Ca)	150	7.48			
Magnesium (Mg)	88	7.24	Nitrate (NO ₃)	1.1	.02
Sodium (Na)	64	2.78			
Potassium (K)	1.7	.04			
Total		17.54	Total		18.16

	ppm		
		Specific conductance (micromhos at 25° C)	1,510
Dissolved solids:		pH	7.7
Calculated	1,110	Color	1
Residue on evaporation at 180° C	1,180		
Hardness as CaCO ₃	737		
Noncarbonate	624		

Lab. No. Col 25902

Field No.

Project KY MAMMOTH CAVE Q GW

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF GEOLOGICAL SURVEY
WATER ANALYSIS

Location Monmouth Cave, Kentucky County Edmonson
 Source Drilled well (Eaton Valley) (New well) Depth (ft) _____
 Cased to (ft) _____ Date drilled _____ Point of use Pump outlet
 Owner National Park Service Use _____
 Treatment _____
 WBF _____
 Temp (°F) _____ Appear when collected Turbid Yield _____
 Collected July 10, 1961, 9:19 PM By H. T. Hopkins and P. Malone
 Remarks Sample collected after 8 hours pumping.

	ppm	epm		ppm	epm
Silica (SiO ₂)	9.5	--	Bicarbonate (HCO ₃)	136	2.21
Aluminum (Al)			Carbonate (CO ₃)	0	.00
Iron (Fe)	4.0	--			
Manganese (Mn) <u>g/l</u>	.18	--	Sulfate (SO ₄)	826	17.80
			Chloride (Cl)	118	1.33
			Fluoride (F)	1.8	.02
Calcium (Ca)	198	9.88			
Magnesium (Mg)	110	9.05	Nitrate (NO ₃)	.2	.00
Sodium (Na)	83	3.61			
Potassium (K)	1.9	.05			
Total		22.59	Total		22.85

	ppm		
Dissolved solids:		Specific conductance (micro-mhos at 25° C)	1,890
Calculated	1,420	pH	7.1
Residue on evaporation at 180° C	1,560	Color	5
Hardness as CaCO ₃			
Noncarbonate	247		
	836		

Lab. No. Col 24520 Field No. _____ Project KY MONMOUTH CAVE G. GW

Eaton Valley

 UNITED STATES DEPARTMENT OF THE INTERIOR
 GEOLOGICAL SURVEY
 WATER ANALYSIS

PROVIS. RECORDS, SUBJECT TO REVISION

2000

S-1,401.4-311.5

Location Hammer Cove, Kentucky County Johnson
 Source Drilled well (New) Depth (ft) 222 Diam (in.) 4-1/2
 Cased to (ft) 0 Date drilled July 7, 1948 Point of coll. Water boiled during drilling
 Owner National Park Service
 Treatment None Use Public supply
 WBF 0 WL Very silty when boiled Yield 0
 Temp (°F) 69 Appear. when coll. Very silty when boiled
 Collected July 7, 1948 By H. A. Ball and R. V. G.
 Remarks

	ppm	epm		ppm	epm
Silica (SiO ₂)			Bicarbonate (HCO ₃)	134	2.20
Aluminum (Al)			Carbonate (CO ₃)	0	.00
Iron (Fe)	0.18	-	Sulfate (SO ₄)	1,070	22.20
			Chloride (Cl)	52	1.55
			Fluoride (F)	2	.01
Calcium (Ca)					
Magnesium (Mg)			Nitrate (NO ₃)	3	.01
Sodium (Na)					
Potassium (K)					
Total			Total		26.01

	ppm		
Dissolved solids:		Specific conductance (micromhos at 25° C)	1,990
Calculated		pH	7.0
Residue on evaporation at 180° C		Color	
Hardness as CaCO ₃	1,180		
Noncarbonate	1,070		

 Lab. No. Col 24506 Field No. Project NY HAMMETH GATE Q GW

Docket Information

Number of Documents in Docket 3

Documents Dated from to

Docket Compiled: 4/27/2011