



WATER-RIGHT DOCKET

Petersburg National Battlefield

Docket No: 1

VISITOR CENTER

Supporting Hydro Data

07-11-1961: water system data

WATER SYSTEM DATA

AREA Petersburg NMP DATE 11 July 1961 COLLECTED BY GEE

1. Name of System: Crater Water System*

2. Location: State Virginia County Prince George General Area Petersburg
Reference to permanent landmark 300 ft. SW of Crater

3. Source of Supply: Well (Deep)** Capacity Unknown
(Well, Spring, Stream, Impoundment, etc.) gph

4. Type of System: Pumped (Pneumatic)
(Pumped, Gravity, etc.)

5. Treatment: None
(Filtration, Chlorination, Airation, etc.)

6. Distribution Mains: Size 2" Length 78'; Size Length
Size Length ; Size Length
Size Length ; Size Length

7. Pump Unit: Make Deming; Type Reciprocating; Model No. 58785
Serial No. ; Outlet 2 in.; Inlet in.
(Size) (Size)

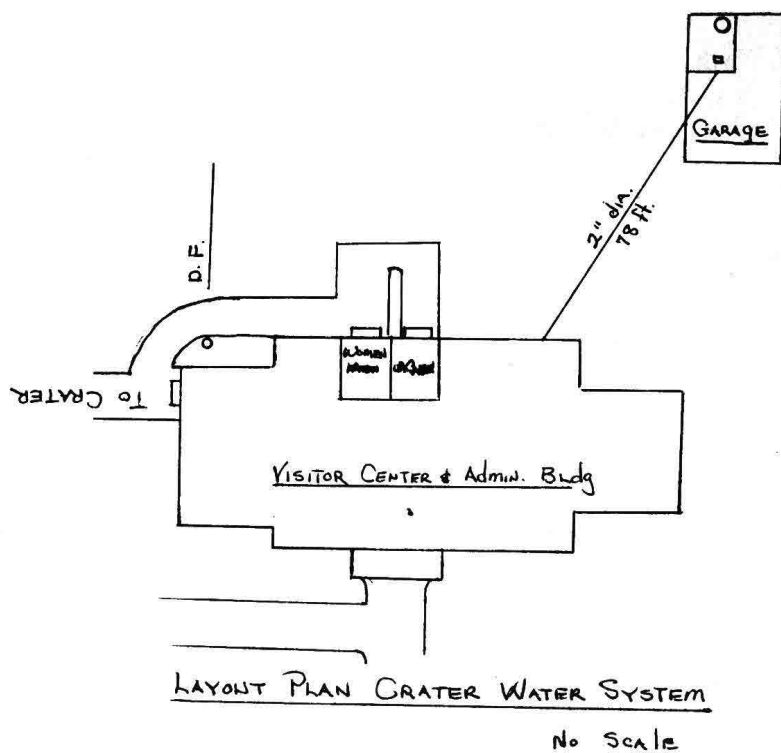
8. Power Source: Electric Motor: Make Deming; HP 2
(Elec., Gas, Generator)
Serial No. L-4-6; Voltage 110/220; Amps 28/14
RPM 1750; Type ; Phase Single
Cycles 60; Others Model No. A1419

9. Control: Automatic Pressure***; Manual
(Float, Electrobe, Pressure, Time)
Other
(Explain)

*See reverse side for layout.

**Well drilled 1937 to a depth of 150 ft., 8 inch casing installed approx. entire length. Well extends into gravel water bearing zone. STATIC level minus 90 ft. No water analysis available.

***Square D Pressure Switch, Class 9013, Type A, Pressure Range 50 - 30 lbs.



10. Pump Design: Capacity 480 gpm (Actual) (Design) gpm
Head ft (Actual) (Design) ft

11. Pump Housing: *Type Const. Frame (Walls) ; Frame (Roof) ; Size 12' x 10'

12. Storage: Pneumatic ; Type Const. Steel
(Pneumatic, Elevated, Underground, etc.) (Concrete, Wood, Steel)
Size 500 gal. ; Capacity 500 gal. ; Inlet 34" above ft. 1 1/2" in. ;
(Elev) (Size)
Outlet 12" above flt. 1 1/2" in. ; Pressure Setting 50 - 30 lbs.
(Elev) (Size) (if pneumatic)

13. Distribution: Water Closets 4 ; Lavatory 3 ; Urinal 2 ;
Drinking Fountain 1 ; Hose Bibs 3 ; Residences ;
Other 1 Water Cooler ; ; ;

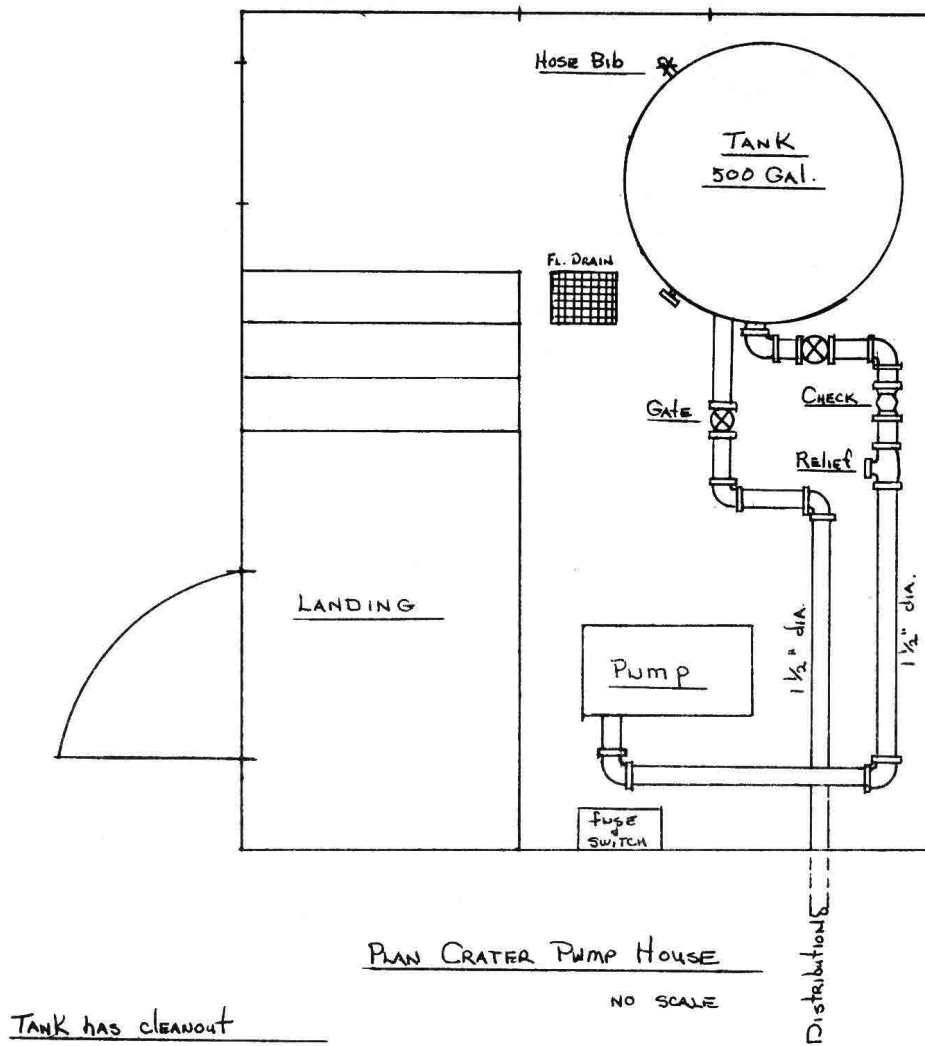
14. Metered or Nonmetered: No ; No. ; Size
No. ; Size
No. ; Size

15. Fire Protection: Fire Hydrants None ; Yard Hydrants None

16. Water Analysis: (If Available) None Available. Fine material is silting out
in tank and requires cleaning of pressure tank periodically.

17. Condition of System: Operation satisfactory and functions in accordance with
(Repairs needed itemize)
design.

*See reverse side for plan.



Other Supporting Information

Petersburg National Battlefield
P. O. Box 549
Petersburg, Virginia 23803

L54 ESC-LW

November 16, 1971

Memorandum

To: Chief, ESC

From: Superintendent, Petersburg

Subject: Water Right Dockets #1 and #2

In reply to Richard Ketcham's subject memorandum of November 5, please be advised that the Crater Visitor Center water system listed as Docket #1, has been out of service since 1967 when we moved to our new Visitor Center. Our new Center is supplied by water from Fort Lee a military reservation immediately adjacent to the park.

Thank you.

Martin R. Conway

cc:
Director, Southeast Region



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
200 West Grace Street, Room 220
Richmond, Virginia 23220

January 12, 1970

Mr. Gary Moore
National Park Service
Eastern Service Center
4228 Wisconsin Avenue N.W.
Washington, D. C. 20242

Dear Mr. Moore:

Enclosed are logs of two wells at Petersburg National Park, Prince George County, Va. Both logs show that Coastal Plain sediments, ranging from 112 to 122 feet thick, are present near the Crater. The aquifer is a sand at a depth of about 100 to 125 feet. Well 58 was pumped at 215 gpm and had a drawdown of 35 feet after pumping 24 hours.

These data suggest it would be possible to develop a water supply in the Battlefield Park.

Yours very truly,

Robert L. Wait

Robert L. Wait
Assistant District Chief

Enclosure

*File
Spokane
USGS Rpts*

TABLE 16. — Logs of wells in Prince George County, Virginia — Continued

Well 60, 1 mile south of The Crater; Rives School
 (Log by Earl McKesson, from memory)
 Altitude, 165 feet

	Thickness <u>(feet)</u>	Depth <u>(feet)</u>
Columbia group (Pleistocene)		
Sand	6	6
Chesapeake group (Miocene):		
Gray clay.	100	106
Potomac group (Lower Cretaceous):		
Sand, water.	6	112

Well 58, Petersburg National Park at The Crater
 (Log by Mitchells Pump and Well Co.)
 Altitude, 127 feet

	<u>Thickness</u> (feet)	<u>Depth</u> (feet)
Columbia group (Pleistocene):		
Red clay	25	25
Chesapeake group (Miocene):		
Blue clay	10	35
Marl, shells	5	40
Marl, shells, and blue clay.	30	70
Blue mud	25	95
Pamunkey group (Eocene):		
Fine black sand and blue mud	10	105
Coarse sand and blue mud	3	108
Potomac group (Lower Cretaceous):		
White sand, water.	4	112
Gravelly sand, water	10	122

LS4 SER(OLW)

APR 23 1964

Memorandum

To: Superintendent, Petersburg
From: Assistant Regional Director, Operations, Southeast Region
Subject: Drilling of test well - Poplar Grove Cemetery, Petersburg
National Battlefield

The subject test well was drilled, developed and pump tested by C. H. Helmick Well Drilling Company of Walkerton, Virginia, during the period April 6 through April 22.

The test well was drilled to a depth of 132' by a hydraulic rotary rig with a mud pump attachment. The well driller collected soil samples at each 5-foot intervals and a small portion of the geologic material was placed in sample bags. These samples have been shipped to the State Geologist, Mineral Resources Division, Virginia Department of Conservation and Development, Charlottesville, Virginia, for a complete soil analysis. The results of this analysis will be forwarded to you at a later date.

After completing the drilling operation, the next step was to insert the casing and screen into the uncased hole. A stainless steel screen, 10' in length, was placed so the top of the screen was 117' below land surface and the bottom at 127'. The contractor filled around the screen with No. 2 graded gravel after which the well was surged with water for a total of nine (9) hours to properly develop the well. A pump test lasting two (2) hours was conducted to obtain well capacity information. The bottom of the test pump intake was placed at the top of the screen. The maximum capacity of well was determined to be 1 gallon per minute. With such a low yield, it was decided to abandon the well on April 22.

The contractor has completed the following bid items in the quantity as shown. We have also shown the unit price and total cost of the project.

<u>Item</u>	<u>Description</u>	<u>Actual Quantity</u>	<u>Unit Price</u>	<u>Total</u>
1	For drilling a 10-inch diameter test hole including collection of samples, furnishing driller's log, providing necessary water and drilling clay for all drilling operations.	132 ft.	\$3.00	\$396.00
5	Developing and pump testing.	11 hrs.	\$10.00	\$110.00
Under Paragraph 10 of General Specifications, Contractor is entitled to \$100.00 for cost of setting, dismantling equipment, and removing casing if well is abandoned.				\$100.00
TOTAL				\$606.00

Geologist Ramsey, Virginia Division of Water Resources, and Mr. Vick of this office will make another water resources investigation at Poplar Grove Cemetery and select a second test well site.

(SIGNED)

E. M. Lisle

cc:
Director

AVick:jt 4/23/64

Docket Information

Number of Documents in Docket 10

Documents Dated from 7/11/1961 to 11/16/1971

Docket Compiled: 6/7/2011