



WATER-RIGHT DOCKET

Arkansas Post National Memorial

Docket No: 1

WATER SYSTEM

Preliminary Docket Information

00-00-0000: water rights data sheet

NATIONAL PARK SERVICE WATER RIGHTS DATA SHEET

Organization Code 7110 Docket Classification F (B) A Docket Number 01 Source Number 21 of 01

Card #1 (1A) 1C
Add Change

Site MONTELENSYSTEM

Location 1 Township/Range --- T 8 S R 3 W Sec 1 2 A B C D of A B C D of A B C D
2 Lat/Long --- Latitude deg min sec N S Longitude deg min sec
3 Other ---

Card #2 (2A) 2C
Add Change

Sequence Number State 05 County ARKANSAS

Acquired by 1 2 3 4 5
Purchase Appropriation Riparian Reservation Other (Explain in Remarks)

Application Number Cancellation Date year month day

Permit Number Cancellation Date year month day

Certificate Number Cancellation Date year month day

RECORD OF TEST
LAYNE-ARKANSAS CO.
 STUTTGART, ARKANSAS

Contract 7596C

WELL NO. _____ DATE Aug. 30, 1965
 FOR Arkansas Post National Memorial Park
 CITY Gillett, STATE Arkansas
 LOCATION Arkansas Post

AIR LIFT TEST
 BLOWOFF PRESSURE (None made) POUNDS
 RUNNING PRESSURE When developed POUNDS
 LENGTH OF AIR LINE With Air) FEET

GUARANTEED GPM 50 AT _____ (FEET)
 (POUNDS)
 STATIC LEVEL 62' 8"
 ACTUAL LENGTH OF AIRLINE _____ FT.

TIME	PUMP		AIR LINE GAUGE LBS.—FT.	DRAW- DOWN	INCHES ON "X" WEIR OR ORIFICE	GPM	Pumping Level		
	RPM	PRESSURE LBS.—FT.							
A.M. P.M.	○	○		○	○	○	62' 8"		
1:00 A.M. ~~1:00 P.M.~~		60		19' 11"		60	82' 7"		
~~2:00 P.M.~~		60		19' 11"		60	82' 7"		
1:00 P.M. ~~2:00 P.M.~~		60		18' 11"		60	81' 7"		
~~2:00 P.M.~~		60		18' 11"		60	80' 9"		
3:00 P.M. ~~3:00 P.M.~~		60		17' 8"		60	80' 4"		
~~4:00 P.M.~~		60		17' 8"		60	80' 4"		
5:00 P.M. ~~5:00 P.M.~~		60		17' 8"		60	80' 4"		
A.M. P.M.									
A.M. P.M.	No Sand - Water clear. Cut pump off. Well recovered 2 min. 5 sec.								
A.M. P.M.	Used Myers pump 108" setting.								
A.M. P.M.									
A.M. P.M.									
A.M. P.M.									
A.M. P.M.									
A.M. P.M.									
A.M. P.M.									
A.M. P.M.									
A.M. P.M.									

 REPRESENTATIVE FOR OWNER

E. W. Brown
 REPRESENTATIVE FOR LAYNE-ARKANSAS CO.

CEMENTING REPORT

Contract Arkansas Post National Memorial No. 7596CCity Gillett County Arkansas State ArkansasWeather Conditions Good

DATE <u>8-2-65</u>	ON LOCATION <u>12:00</u> A.M. ~~8:00~~	JOB BEGAN <u>3:30</u>	JOB FINISHED <u>4:00</u>	
CASING Size <u>6"</u> Wt. _____ Depth <u>643'</u> Screw <u>x</u> Welded _____ New <u>x</u> Used _____ Other _____ _____ _____ _____		CEMENT Type <u>Ideal</u> Brand <u>Portland</u> Sacked <u>x</u> Bulk _____ Wt. Per Lb. (Fluid) <u>13-1/2</u> No. Sacks <u>265</u> Ft. Left In Casing _____ Cement Circulated ~~Yes~~ No % Gel Or Other Mix _____ _____ _____ _____		Size Casing Hole <u>11"</u> Depth Casing Hole <u>643'</u> Bull Nose Plug _____ Float Shoe _____ Rotary Shoe <u>x</u> Other _____ _____ Cementing Pressure _____ # Plug Pumping Pressure _____ # Plug Pumping Fluid Mud Wt. # _____ _____ Water _____

No. Miles Driven This Job 120

NAME

Cementer R. L. Benson

Driver _____

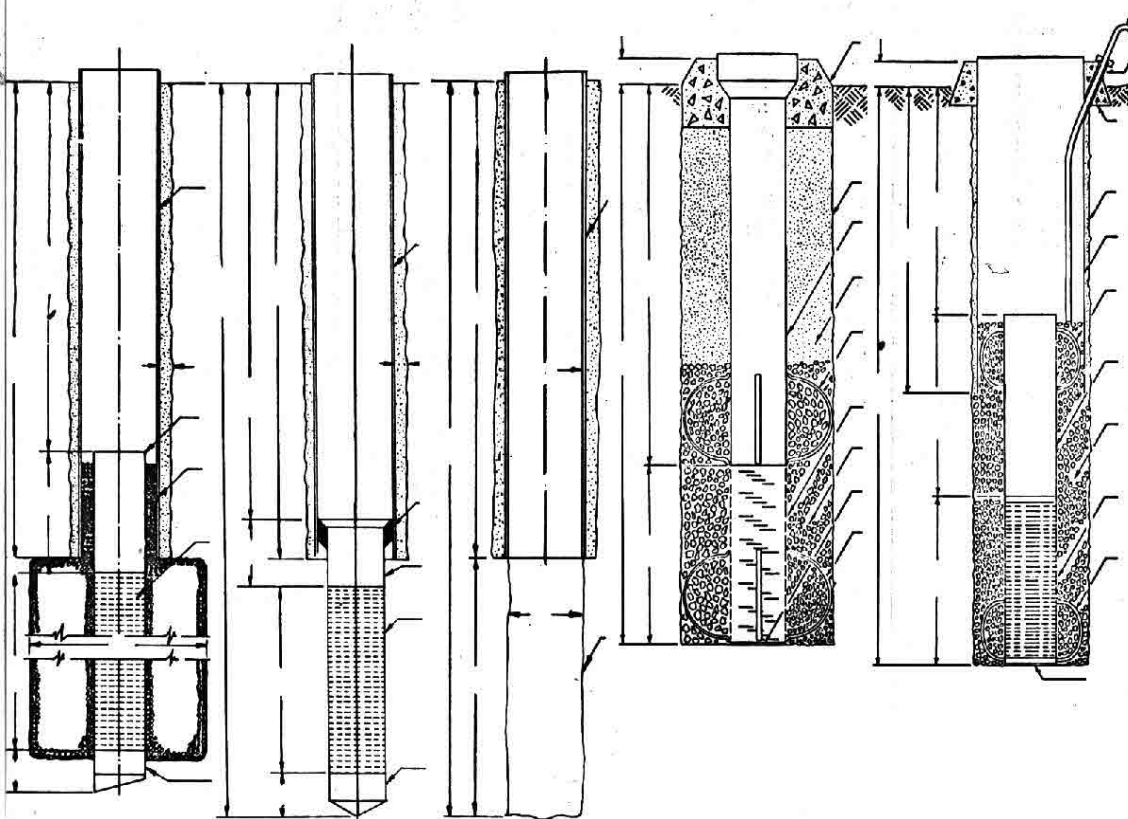
Driller H. BullockSuperintendent F. SeayNotes: No Trouble.

OK - Field Superintendent

E. O. Seay

Signed, Cementer

R. L. Benson

Contract No. 7596CLog of Well for Arkansas Post Nurional MemorialWell No. 1Address (City) Gillett, (County) ArkansasState ArkansasLocation of Well Arkansas PostMade in Test Hole No. 1Made 0 Ft. From Test Hole

STARTED WELL July 23, 1965 AND COMPLETED August 6, 1965
 TOTAL DEPTH 659' ELEVATION _____ STATIC WATER LEVEL 64'
 ALL MEASUREMENTS TAKEN FROM GROUND SURFACE (TOP OF CASING) GROUND SURFACE
 SURFACE CASING: SIZE None LENGTH _____ THICKNESS _____ T & C WELDED
 CEMENTED WITH _____ SACKS CEMENT OR PACKER TYPE _____
 WELL CASING: SIZE 6" Galv. LENGTH 644' WEIGHT 19.5 T & C
 CEMENTED WITH 265 SACKS CEMENT OR PACKER TYPE _____
 INNER CASING SIZE 4 LENGTH 15' 6" TYPE MATERIAL Galv. T & C
 WITH 4 x 6 (GUIDES LOCATED) Seal TYPE BACKOFF Std. L. H.
 SIZE SEAL 4 x 6 BACKPRESSURE VALVE Cook SIZE 4 LENGTH GUIDE _____
 WELL STRAINER: MAKE Cook TYPE WW SIZE 4-1/2 OD LENGTH 10' OPENING .010
 TYPE MATERIAL Si. Bronze WITH T & C CONNECTIONS
 SIZE HOLE DRILLED FOR SURFACE CASING _____ WITH _____ BIT
 SIZE HOLE DRILLED FOR WELL CASING 11" WITH 6-Way BIT
 SIZE HOLE DRILLED FOR STRAINER 5-5/8" WITH 6-Way REAMER
 YARDS OF GRAVEL USED 0 HOW PLACED _____ TYPE _____
 HOW WAS WELL DEVELOPED Air SAND? _____ CLEAR?
 FOUNDATION INSTALLED NO LINE DEPTH FEELING RODS _____ TOP OF WELL 633'

LAYNE-ARKANSAS COMPANY

LOG AND DESCRIPTION OF TEST HOLE NO. 1 WELL NO. 1DRILLED FOR Arkansas Post National Memorial Park 7596 cADDRESS Gillett, Arkansas (Arkansas Post) DATE August 6, 1965OF SEC. TS R COUNTY Arkansas

TOTAL DEPTH	EACH STRATUM	FORMATION	TOTAL DEPTH	EACH STRATUM	FORMATION
40	40	Clay			
100	60	Coarse Sand			
167	67	Coarse Sand & Gravel			
220	53	Hard Shale			
302	82	Soft Shale			
303	1	Rock			
500	197	Hard Shale			
549	49	Sandy Shale			
550	1	Rock			
600	50	Hard Shale			
610	10	Sandy Shale			
620	10	Fine Sand			
660	40	Medium Sand			
664	4	Brake			
678	14	Medium Sand			
681	3	Gumbo			

DRILLING TIME 30 HR.DAYS ON JOB 3SIZE TEST HOLE 11" and 6-5/8TYPE BIT USED 6 wayH. Bullock

DRILLER

F. O. Seay

FIELD SUPT.



LAYNE-ARKANSAS CO.



IN REPLY REFER TO:

LS4

UNITED STATES
DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE
Arkansas Post National Memorial
Gillett, Arkansas 72055
September 4, 1965

RECEIVED	
SEP 7 1965	
Btc	
Supr.	
Asst. Supr.	
Chief	
Pl. Insp.	
Gen. Inv.	
Secretary	
Files	

Memorandum

To : Superintendent, Hot Springs National Park

From : Management Assistant, Arkansas Post

Subject: Layne-Arkansas Company Invoice

I have checked the subject invoice, well chart, cement report, and yield and drawdown report against my field notes. The following is my report.

The equipment was moved in on July 26, 1965, in an orderly manner, with no damage to Park property.

The contractor elected to drill the test hole eleven (11) inches, large enough to receive the six (6) inch casing and the two (2) inch grouting.

After the test hole was completed, the well was logged by Mr. Roy H. Bingham, U.S. Geological Survey, Nashville, Tennessee, and found to be in good water-bearing sand of sufficient quantity. The Electric and Gamma Ray Logs were mailed to you.

I have the samples here at Arkansas Post of the geological material that was taken while drilling.

The six (6) inch casing met specifications of weight and size. The joints were fitted with long recessed couplings. The casing was installed with stabilizers fastened to the outside of every other joint to center the casing in the eleven (11) inch reamed hole so the grout would have uniform wall thickness.

The grout was mixed on site to the right consistency and pumped to the bottom of the hole using the Halliburton Method by continuous operation (about fifty minutes), until the grout appeared at the surface of the ground on the outside of the casing.

The grout was allowed to set up for three days before the work was continued.

The casing was found to be truly perpendicular and in perfect alignment.

The screen conformed to the standard specifications of the American Water Works Association. The size of the screen covered the maximum requirements. The openings in the screen were determined in accordance with the effective size and uniformity coefficient of the sand found in the water-bearing strata.

The screen, four (4) inch casing, back pressure valve, and lead seal were installed according to specifications.

The well was developed by air pressure until the maximum amount of sand had been extracted. The operation was continued until the water became clear of sand, and only a slight chalk-like discoloration remained.

The pipes were cleaned and thoroughly swabbed to remove all foreign matter. The well was then treated to a 50ppm+ solution of chlorene that stood overnight.

The yield and drawdown test was made as indicated on the Record of Test. Some additional tests were made that are not recorded on the Record of Tests. After the recorded tests were made, we pumped the well several times to check the drawdown time and the recovery, keeping the pump set on sixty (60) gallons per minute. The average drawdown time (down to the 80' 4" level) was seven and one half (7½) minutes. The average recovery time was a fraction under two (2) minutes. The water is clear, soft, and has no noticeable gas or sulphur odor.

The last equipment was moved out August 9. The grounds were kept neat and in order while working, and left in a very satisfactory condition.

All work was performed in a good workmanship-like manner.

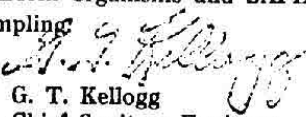
All items and services (one through six) listed on the invoice were received.



T. Reid Cabe

**ARKANSAS STATE BOARD OF HEALTH
BUREAU OF SANITARY ENGINEERING
Little Rock, Arkansas**

The bacteriological examination of the 2 samples of
water submitted from the ~~public~~ supply of Arkansas Post, Ark.
on 8/31/65, shows the water as represented by
these samples to be free from coliform organisms and SAFE for
drinking purposes at the time of sampling.


G. T. Kellogg
Chief Sanitary Engineer

CHEMICAL RECORD of WATER ANALYSIS
 Arkansas State Board of Health Chemistry Laboratory

copy to Ark. 9-15-65 3

Lab. No. <u>6974</u>	Date Collected <u>8-31-65</u>	Date Received <u>9-1-65</u>	Date Reported <u>9-15-65</u>
Collected By <u>E. W. Brown, Layne-Ark.</u>		Address <u>State</u>	
Town <u>Arkansas Post Nat. Memorial</u>		County <u>Arkansas</u>	
Source _____			
Point of Collection <u>Ark. Post</u>			
Report To _____		Address _____	

	PPM		PPM		PPM
Color	<u>30</u>	Calcium	<u>2.0</u>	Sodium	<u>39</u>
Taste	<u>-</u>	Magnesium	<u>0.75</u>	Potassium	<u>1.5</u>
Odor	<u>0</u>	Iron	<u>0.25</u>		
Turbidity	<u>18</u>	Manganese	<u>0</u>		
Sediment	<u>Light</u>	Fluoride	<u>0.10</u>		
Reaction—pH	<u>8.8</u>	Chromium	<u>-</u>		
Alkalinity—Phenolphthalein	<u>8</u>	Copper	<u>-</u>		
Methyl Orange	<u>111</u>	Arsenic	<u>-</u>		
Total Solids	<u>168</u>	Selenium	<u>-</u>		
Hardness—Total	<u>8</u>	Aluminum	<u>0</u>		
Carbonate	<u>8</u>	Lead	<u>-</u>		
Non-carbonate	<u>0</u>				
Chlorides	<u>2.0</u>				
Sodium Chloride	<u>3.3</u>	Nitrate Nitrogen	<u>0.18</u>		
Sulphates	<u>7</u>	Nitrite Nitrogen	<u>0.335</u>		

Director
Form CL-2

E. F. Wilson

Chemist Gay McCormick

10M-10-62-31805-Ark.P.&L.Co.

Other Supporting Information

INVOICE
LAYNE-ARKANSAS COMPANY

P. O. BOX 790



STUTT GART, ARKANSAS 72160

SOLD TO National Park Service
 Hot Springs National Park
 P. O. Box 1219
 Hot Springs National Park, Arkansas 71902

INV. NO. 2608

G. O. NO. 7596C

SHIPPED TO
 Arkansas Post National Memorial
 Arkansas County, Arkansas

YOU. NO.

CUSTR. NO. Cont. 14-10-0131-1471

DATE August 31, 1965

SHIPPED VIA

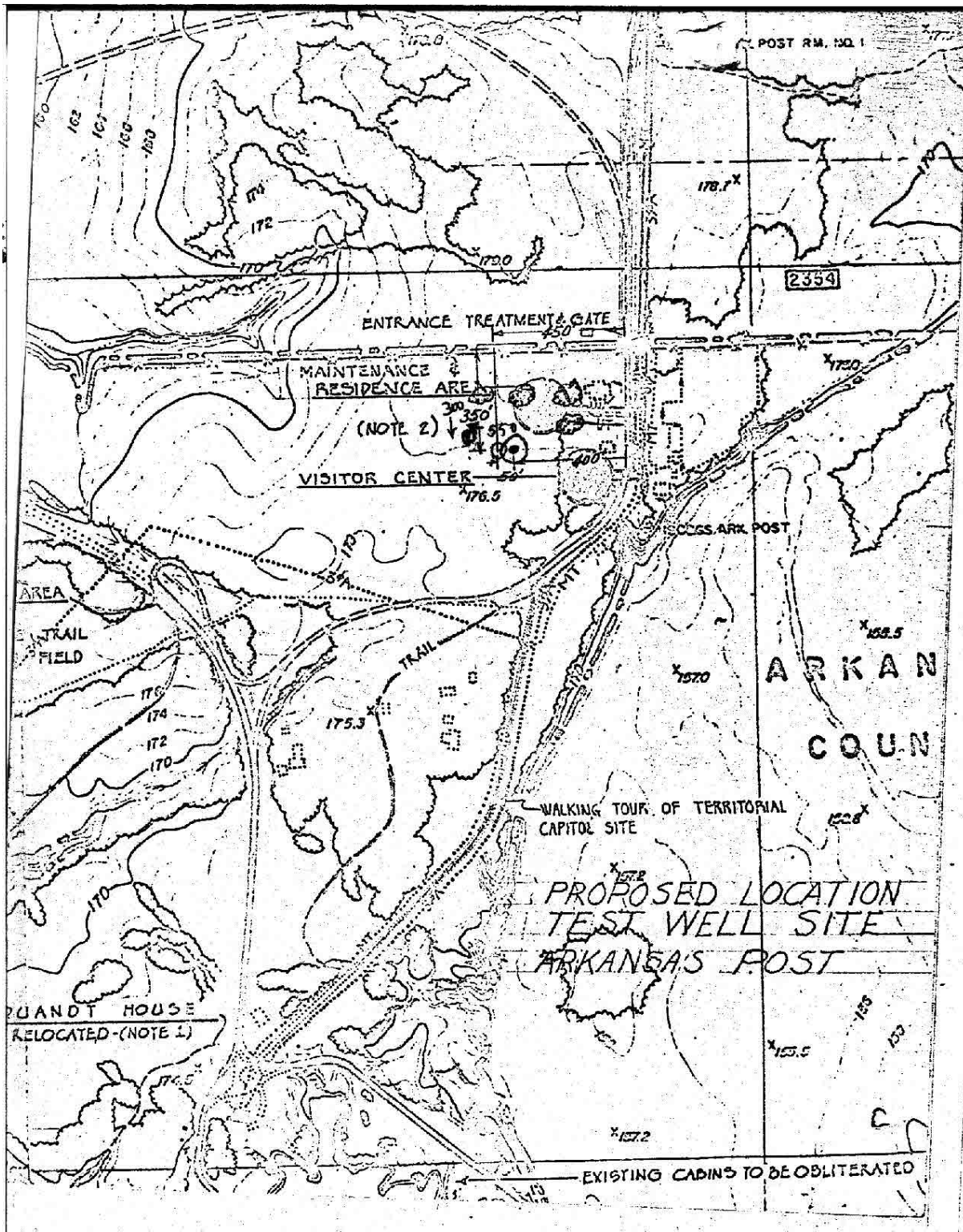
TERMS

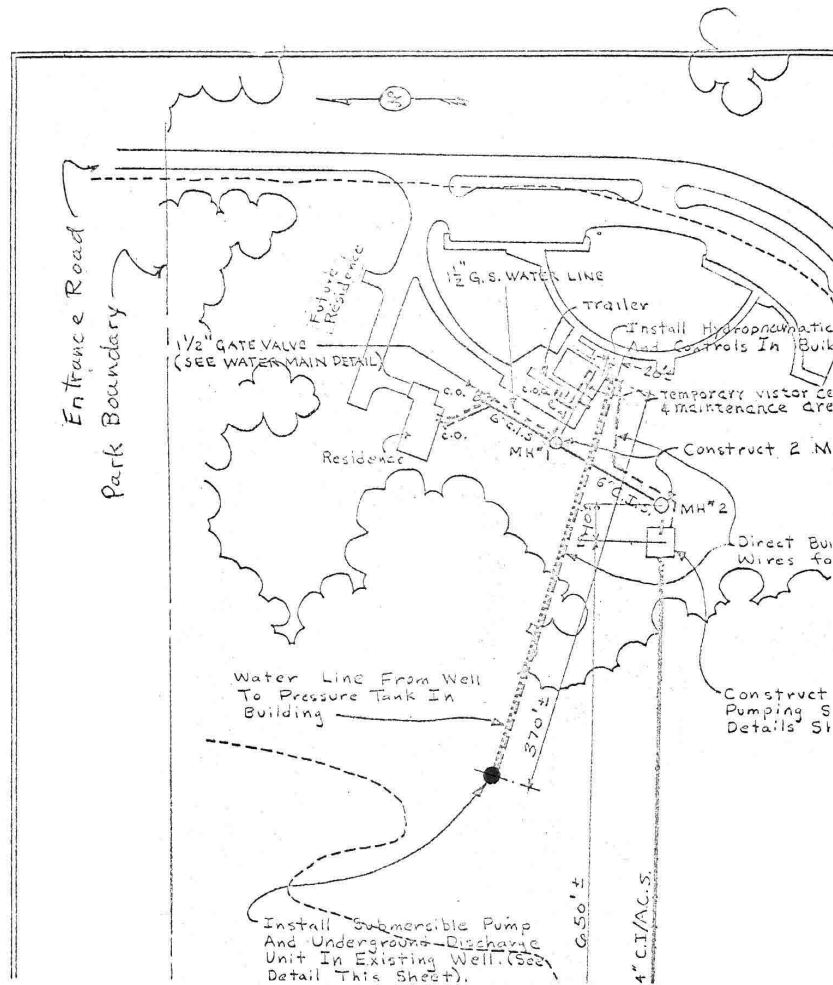
Item		Actual	Bid
1	Move in move off LS	200.00	200.00
2	Drilling test hole 681' @ 1.50 per ft.	1,021.50	1,050.00
3	Reaming test hole 644' Set 6" @ 5.50	3,542.00	3,795.00
4	Furnish & install 10' - 4" screen @ 15.00	150.00	150.00
5	Test for yield & drawdown 6 @ 12.00	72.00	144.00
6	Standby time "Elec. Log" 2 hr. @ 12.00	24.00	48.00
		<u>5,009.50</u>	<u>5,387.00</u>

14x1035 (0343) - 25

water well

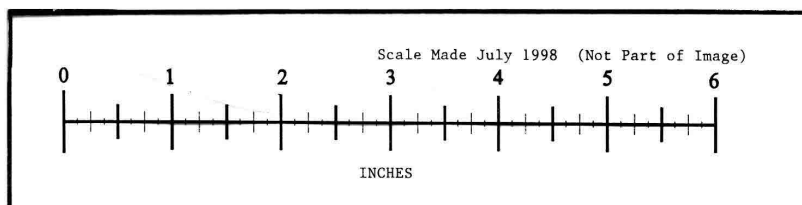
Maps and Miscellaneous Information





ARKANSAS POST NATIONAL MEMORIAL

(Above is portion of Dwg. N Mem - A P/3014)
dated April 1966, re PCP U-1-1, Scale 1"= 10'



Docket Information

Number of Documents in Docket 13

Documents Dated from 8/2/1965 to 9/4/1965

Docket Compiled: 1/31/2011