



WATER-RIGHT DOCKET

George Washington Carver National Monument

Docket No: 1

WELL

State Water Rights Documentation

06-03-1964: letter to superintendent from newton county health department regarding report of approval of the new water supply s


OFFICE OF THE DIRECTOR

THE DIVISION OF HEALTH
OF MISSOURI
CITY OF JEFFERSON

June 3, 1964

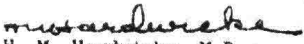
Gov-Fed. Interior
National Park Service

Mr. Joseph C. Rumberg
Superintendent
George Washington Carver
National Monument
Diamond, Missouri

Dear Mr. Rumberg:

Attached you will find a report of approval of the new water supply system which is to serve the George Washington Carver Monument, Diamond, Missouri. This facility, with proper operation, should provide a safe water of good quality.

Sincerely,


H. M. Hardwicke, M.D.
Acting Director
Missouri Division of Health

HMH-JWS:eh

Enclosure

cc: U. S. Public Health Service
Newton County Health Department
District Health Office No. 5

THE DIVISION OF HEALTH
OF MISSOURI

REPORT ON FINAL INSPECTION AND APPROVAL OF WATER SUPPLY FACILITIES
GEORGE WASHINGTON CARVER NATIONAL MONUMENT
DIAMOND, MISSOURI
May 20, 1964

INTRODUCTION

Final inspection of the water supply facilities serving George Washington Carver National Monument, Diamond, Missouri, was made by a representative of the Division of Health on May 14, 1964.

BRIEF DESCRIPTION

Briefly the completed works consist of a deep drilled well drilled to a total depth of 851 feet and cased to a depth of 420 feet with a 6 inch wrought iron steel casing weighing 19.45 pounds per foot. The casing was sealed in place by the pressure grout method. The water supply facilities include a 35 gpm submersible pump, a "Chloro Feeder" proportional solution feed chlorinator, an "Aqua-Matic" water softener, a 575 gallon pressure tank, a 20,000 gallon surface concrete storage reservoir, a 250 gpm gasoline driven engine auxiliary high service pump to be used in case of fire, and the necessary piping, valves, fittings and appurtenances essential to the operation of the system. The well, pressure tank, water softener and pumping equipment is located in a room on the south end of the new visitor center. The room is of sufficient size to provide proper maintenance and operation of the equipment.

FINAL APPROVAL

The completed sanitary works described above were examined as to features of construction which may affect the operation of such systems, including size, capacities of various units, and features which may affect the efficiency and ease of operation. The completed works, so far as could be determined, are constructed essentially in accordance with the approved plans, and final approval of the completed works is hereby granted.

In the final inspection of the works, the Division of Health does not examine into structural features, or the efficiency of mechanical equipment. This final approval does not include approval of these features.

The Division of Health reserves the right to withdraw the approval of the sanitary works at anytime it is found to be operating unsatisfactorily, and to require alterations, additional treatment or changed methods of operation as deemed necessary to place the works in satisfactory condition.

Glen A. Harwell
Glen A. Harwell, Sanitary Engineer III

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

George Washington Carver National Monument
Diamond, Missouri

Regional Director,
National Park Service,
307 Federal Office Building,
Omaha, 2, Nebraska

JUL 19 1957

Account No. 332.1: Contract No. 14-10-232-186; Drilling of a well,
installing casing, and testing. George Washington Carver National
Monument.

Estimate No. 1 and Final:

George Provina Drilling Company has furnished the labor, materials
and equipment to accomplish the following work under its contract
in accordance with plans and specifications.

	Original amount of contract	\$6,544.00
Item No.	Description:	Lump sum amount
1	Deep well complete as specified including casing, cementing, sealing and disinfecting	\$6,384.00
2	Pumping test as specified, 16 hrs. @ \$10 per hr.	160.00
	Total	\$6,544.00

State Geologist has ascertained that well is in the
Roubidoux formation. The well is very satisfactory in that it
produces an abundant supply of potable water. All work was completed
on June 28 and accepted on that date. No liquidated damages are
involved.

Approved for payment:

Clarence H. Schultz
Clarence H. Schultz
Superintendent.

D 5039

RECEIVED
REGION TWO OFFICEGeorge Washington Carver National Monument
Diamond, Missouri

1957 JUL 5 AM 11:12

NATIONAL PARK SERVICE
DIAMOND, NEBRASKA

REG. DIRECTOR
ASST. REG. DIRECTOR
CH. DIV. OF ADMIN.
CH. DIV. OF OPERATIONS
CH. DIV. OF INTERP.
CH. DIV. OF INSP.
CH. DIV. OF RESEARCH
CH. DIV. OF TRAINING
CH. DIV. OF PUBLIC AFFAIRS
CH. DIV. OF RECORDS & COMM.
CH. DIV. OF FACILITIES
CH. DIV. OF SAFETY
CH. DIV. OF SECURITY
CH. DIV. OF COMPLIANCE
CH. DIV. OF ENVIRONMENTAL
CH. DIV. OF HISTORIC PRESERVATION
CH. DIV. OF LAND ACQUISITION
CH. DIV. OF LEGAL COUNSEL
CH. DIV. OF POLICE
CH. DIV. OF SOCIAL SERVICES
CH. DIV. OF SPECIAL INVESTIGATIONS
CH. DIV. OF TECHNICAL SERVICES
CH. DIV. OF TOURISM
CH. DIV. OF UTILITIES
CH. DIV. OF WILDLIFE
CH. DIV. OF WOODS
CH. DIV. OF ZOOLOGICAL

July 3, 1957

Mr. John Grohskopf, Geologist
Geological Survey and Water Resources
Department of Business and Administration
Kella, Missouri

Dear Mr. Grohskopf:

This acknowledges receipt of your letter dated July 1, indicating that the Moundou formation was drilled at a depth of 305 feet in the well at the George Washington Carver National Monument. There is enclosed an accomplished blank form relative to the grouting of the well by the Hal Martin Company on June 14, supplied in compliance with your request.

The pumping test on the well began at 2:00 p.m. on June 26, and ran for 16 hours terminating at 6:00 a.m. on June 27. A submersible type test pump was used, yielding 38 gpm. The static level of the well was 51 feet. A draw-down of 8 feet and a half was noted the first ten minutes of the pumping test. After that time the well leveled off and no measurable draw-down was noted.

Sincerely yours,

Clarence H. Schultz

Clarence H. Schultz
Superintendent

Enclosure

Dist. Director
Regional Director
RDC

REC'D 1957 JUL 10 1957

C
O
P
Y

State of Missouri
Division of
GEOLOGICAL SURVEY AND WATER RESOURCES
Department of Business and Administration

July 1, 1957

Mr. Clarence H. Schultz, Superintendent
United States Department of the Interior
George Washington Carver National Monument
Diamond, Missouri

Dear Mr. Schultz:

We have examined samples to a depth of 850 feet from the
George Washington Carver well in Sec. 7, T. 26 N., R. 31 W.,
Newton County.

Our examination of these samples indicates that the top of
the Roubidoux formation was drilled at depth 805 feet in this
well. I am enclosing herewith a blank form concerning the ce-
menting of the casing which I would appreciate your filling out
and returning to me for our files. Should you have any details
concerning the pump test, I would appreciate receiving that also.

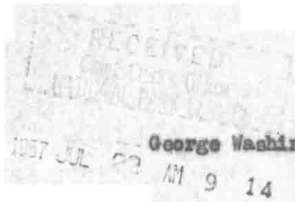
Sincerely yours,

John Grohskopf
Geologist

JG:rr
Enc.

CC: Mr. George Provine

REC'D



D 5039

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Vint

[Signature]

George Washington Carver National Monument
Diamond, Missouri

Memorandum

July 18, 1957

To: Chief, BODC

From: Superintendent, George Washington Carver NM

Subject: Well Record

This is in reference to Mr. Zimmer's, Chief of BODC, memorandum of July 15, 1957, and Mr. Robertson's, Acting Regional Chief of Operation, memorandum of July 16, 1957, relating to the preparation and submission of the form, Record of Well, from the Geological Survey.

The Region Two Office has supplied us with four copies of the form, Record of Well, which we are forwarding to Mr. Provine for preparation in compliance with Paragraph 9, Section III of the specifications for the water supply well. Mr. Provine supplied us with copies of his well log prepared on his own stationery on June 25, 1957. It was thought that this material was in compliance with the requirements cited above.

For your record Mr. Provine's log is attached.

(Sgd.) Clarence H. Schultz

Clarence H. Schultz
Superintendent

cc Regional Director, with Provine's log
Director, with Provine's log

GWA

GEORGE PROVINE DRILLING CO.
BOX 974
MIAMI, OKLAHOMA

COUNTY Newton County - Missouri COUNTY REF. NO. _____

OWNER National Park Service - Department of Interior

DRILLERS J.R. Patrick - Joplin, Missouri

Clint Crow - Joplin, Missouri

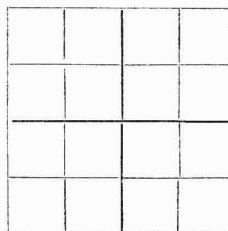
LOCATION West of Diamond, Mo. SEC. 7 TWP. 26 N. RANGE 31 W.

TOTAL DEPTH (FT.) 852 feet ELEVATION (FT.) 1070 feet

BEGAN DRILLING ~~November 1, 1957~~ May 1, 1957

COMPLETED DRILLING June 14, 1957 WATER PRODUCING FORMATIONS _____

Swan Creek SS. Roubidoux SS. (top)



STATIC WATER LEVEL 51 feet from surface

RESULTS OF PUMP TESTS:

HRS. PUMPED CONTINUOUSLY 21 hours DISCHARGE (G. P. M.) 30 to 37 gpm

DRAW DOWN (FT.) one foot & six inches (1-1/2 feet).

SPECIFIC CAPACITY _____ G.P.M. PER FT. OF DRAW DOWN _____

YIELD (G. P. M.) _____ CGS. DI. 6 inch ID. CGS. WT. 19.45#/ft.

CASING SET AT _____ CEMENTED WITH (SKS) 140 sks Reg. Portland

CIRCULATION yes (near 100%)

LOG OF WATER WELL

DEPT.	FORMATIONS	REMARKS
5	Surface soil; gray & yellow chert; red clay	
10	Gray and yellow chert; red clay	
15	Gray and yellow chert; red clay; light brown lime	
20	Light brown and gray limestone; dark gray and gray chert	
25	Light brown limestone; gray chert	
30	Light brown limestone; bluish gray chert	
35	Light brown limestone; bluish gray and mottled chert	
40	Gray, bluish gray and mottled chert; brown lime	
45	Gray and brown lime; bluish gray, gray and mottled chert	
50	Gray and brown lime; gray chert; trace green shale	
55	Gray and brown lime; little gray chert	
60	Gray and brown lime little gray chert	
65	Light brown and gray lime; gray, bluish gray and mottled chert	

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PAGE _____

GEORGE PROVINE DRILLING CO.
BOX 974
MIAMI, OKLAHOMA

COUNTY _____

LOG NO. _____

OWNER _____

WELL NO. _____

DEPTH.		FORMATIONS	REMARKS
70	75	Brown lime; gray bluish gray and mottled chert	
75	80	Brown lime, gray, bluish gray chert	
80	85	Gray and brown lime; gray chert	
90	95	Gray and brown lime; blue and gray chert	
95	100	Gray and brown lime; gray, bluish gray and mottled chert	
100	105	Gray and brown lime; gray chert	
105	110	Light brown and gray lime; gray chert	
115	120	Gray and brown lime; light gray chert	
120	125	Brown and gray lime; gray and bluish, gray chert	
125	130	Dark brown lime; trace gray chert	(sclite)
130	135	Gray and brown lime; little gray chert	
135	140	Gray and brown lime; little gray chert	
140	145	Brown and gray lime; little gray and yellow chert	
145	150	Gray and brown lime; light gray chert	
150	155	Brown and gray lime; gray and light gray chert	
155	160	Brown and gray lime; little gray chert	
165	170	Gray and brown lime; little gray chert	
170	175	Dark brown and gray lime; little gray chert, little gray selva	
175	180	Dark brown and gray lime; little black shale; trace gray chert	
190	195	Gray and brown lime; little gray chert; trace marcasite	
195	200	Light brown and gray lime; some gray chert; trace black shale; trace marcasite	
200	205	Light gray and bluish gray and mottled chert; gray lime; trace black shale; trace marcasite	
205	210	Light gray, bluish gray and little light brown chert; gray lime; little black shale; trace of marcasite	
210	215	Brown and gray lime; some gray and mottled chert; trace marcasite	
215	220	Light brown and gray lime; light gray chert; trace marcasite	
220	225	Light brown lime; bluish gray and gray chert; trace marcasite	
225	230	Brown lime, bluish gray and gray chert	
230	235	Bluish gray and mottled chert; brown lime	
235	240	Bluish gray, gray and mottled chert; dark brown lime	
245	250	Gray, light gray, bluish gray and some dark blue mottled chert; dark brown lime	(strong water)
255	260	Gray, mottled and some dark brown chert; very little dark brown limestone	
260	270	Gray, bluish gray and mottled chert; dark brown lime	
270	275	Gray and some mottled chert; dark brown lime	
275	280	Bluish gray and mottled chert; dark brown and brown lime; few dolomite crystals	
280	285	Bluish gray and some dark brown and mottled chert; dark brown and brown limestone	
285	290	Bluish gray and some mottled and dark blue chert; brown lime	
295	300	Dark blue, mottled and some gray chert; dark gray and brown lime; trace marcasite	

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PAGE

GEORGE PROVINE DRILLING CO.
BOX 974
MIAMI, OKLAHOMA

COUNTY

LOG NO.

OWNER

WELL NO.

DEPTH.		FORMATIONS	REMARKS
300	305	Dark brown and gray limestone; dark blue and some gray chert; trace marcasite	
305	310	Dark brown and gray lime; dark blue and gray chert; few specks marcasite	
310	315	Dark brown lime; trace dark blue chert; trace marcasite	
315	320	Dark brown limestone; trace dark blue chert; little green shale; trace marcasite	
320	330	Dark brown and gray lime; gray selvage, very little green shale; very little brown chert	
330	335	Dark gray and gray lime; little dark gray chert gray selvage; trace marcasite	
335	340	Gray and greenish gray lime; trace brown chert; gray selvage; marcasite	
340	345	Greenish gray; gray and brown lime; trace translucent blue chert; trace marcasite	
345	350	Greenish gray and gray lime; blue chert; few dolomite crystals; some gray selvage; marcasite	
350	355	Light brown and gray lime; some blue chert; light gray selvage; trace marcasite; trace dark gray shale	
355	360	Light gray lime; hard sandy greenish gray shale; trace marcasite	
360	365	Gray light brown and greenish gray limestone; some greenish sandy shale; marcasite	
365	370	Brown limestone; translucent bluish gray chert; trace marcasite	
370	375	Brown limestone; little translucent gray chert; trace marcasite	
375	380	Brown and some gray lime; trace gray chert; trace marcasite	
380	385	Brown lime; little gray and blue chert; little gray sandy shale	
385	390	Light brown lime; light gray selvage; little gray chert (somewhat sandy)	
390	395	Light brown and brown lime; gray selvage; little little translucent gray chert; trace marcasite	
395	400	Brown lime; brown selvage; very little gray chert; dark black shale; trace marcasite	
400	405	Gray and brown lime; trace gray chert	
405	410	Light brown lime; gray selvage; green shale	
410	415	Brown and some gray lime; little gray chert	
415	420	Brown lime; little semi-translucent bluish gray chert; trace green shale	
420	425	Light brown lime; trace gray chert; trace black shale	
425	430	Light brown lime, green shale, very little light gray chert	
430	435	Dark brown and brown lime; very little white chert	
435	440	Light brown lime; trace green shale	
440	445	Light brown lime	
445	450	Light brown lime; little gray chert	
450	460	Light brown lime; trace white and light gray chert	

PAGE _____

GEORGE PROVINE DRILLING CO.
BOX 974
MIAMI, OKLAHOMA

COUNTY _____

LOG NO. _____

OWNER _____

WELL NO. _____

DEPTH.		FORMATIONS	REMARKS
460	465	Light brown lime and little dark brown lime; some gray chert; trace greenish brown shale	
465	470	Light brown and dark brown lime; trace quartzite; trace brownish green shale	
470	475	Dark brown and some light brown lime; trace brownish gray shale; trace light gray chert	
475	480	Dark brown sandy lime; trace brownish-gray shale	
480	490	Dark brown slightly sandy lime	
490	500	Dark brown lime; some grayish-blue lime; trace white chert	
500	510	Dark brown and light brown lime; some semi-translucent gray chert	
510	515	Dark brown lime; light gray selvage; little gray chert	
515	520	Dark brown and some light brown lime; gray and some white and yellow chert	
520	525	Dark brown and light brown lime; trace chert	
525	530	Brown lime; trace white chert	
530	535	Light brown sandy lime	
535	540	Light brown lime; light brown selvage; white chert	
540	545	Light brown and light brown sandy lime; gray selvage; little gray, white and blue chert	
545	555	Dark brown sandy lime; trace white chert	
555	575	Dark brown lime; trace gray chert	
575	585	Dark brown lime; some gray and blue chert	
585	595	Light brown lime; little gray chert	
595	600	Brown sandy limestone; very little gray chert	
600	650	Brownish gray sandy limestone; trace light gray chert	
650	660	Brown lime; little gray chert	
660	675	Brown lime; white and gray chert; trace shale	
675	685	Brown and dark brown lime; light brown selvage; trace light gray chert	
685	695	Brown lime; light brown selvage; trace gray chert	
695	710	Brown lime; light gray chert	
710	725	Brown lime; greenish brown selvage	
725	730	Brown, dark brown lime; trace gray chert	
730	740	Light brown, some gray and dark gray chert	
740	750	Brown and dark brown lime; trace gray chert	
750	760	Brown lime; trace gray selvage; trace gray chert	
760	765	Sandy brown limestone; trace light gray chert	
765	770	Brown and some sandy brown lime; light gray selvage; trace chert	
770	785	Dark brown and brown lime; trace gray chert	
785	795	Brown and some dark brown lime; some bluish gray chert; light grayish brown selvage	
795	805	Brown lime; little gray chert	
805	850	Grayish brown limy sandstone	

George Provine

TEST PUMP PROCEDURE - George Washington Carver
National Monument

Diamond, Missouri

Date of Test - June 26, 1957

June 27, 1957

Total Hours Tested - 16 hours.

Depth of Pump setting - 100 feet.

S.W.L. - 51 feet.

Maximum Drawdown - $1\frac{1}{2}$ feet.

Production - 30 to 37 gals. per min.

TIME	METER READING	PUMPING LEVEL	DRAW- DOWN	GALLONS PER MIN.	REMARKS
2:00 Pm	34220	51 ft.			Start test. June 26, 1957
2:10 Pm	34540	52 $\frac{1}{2}$ ft.	1 $\frac{1}{2}$ ft.	32 gpm.	
2:20 pm	34910	52 $\frac{1}{2}$ ft.	none.	37 gpm.	
2:30 pm	35170	" "	"	31.75 gpm.	
2:40 pm	35490	" "	"	32 gpm.	
2:50 pm	35810	" "	"	32 gpm.	
3:00 "	36110	" "	"	30 gpm.	
3:30 "	37090	" "	"	32.75 gpm.	
4:00 "	38030	" "	"	31.33 gpm.	
4:30 "	38970	" "	"	31.33 gpm.	
5:00 "		" "	"	31.50 gpm.	
5:30 "		" "	"	30. gpm.	
6:00 "	41830	" "	"	31.83 gpm.	
6:30 "	42860	" "	"	32 gpm.	
7:00 "	43850	" "	"	32 gpm.	
7:30 "	44810	" "	"	32 gpm.	
8:00 "	45770	" "	"	32 gpm.	
9:30 "	48450	" "	"	32.20 gpm.	
10:00pm.	49420	" "	"	30.23 gpm.	
10:30 "	50350	" "	"	30.10 gpm.	
11:00 "	51290	" "	"	30.13 gpm.	
11:30 "	52240	" "	"	30.16 gpm.	
12:00 "	53180	" "	"	30.13 gpm.	
12:30 "	54140	" "	"	32.00 gpm.	
01:00 AM	55100	" "	"	32.00 gpm.	
02:30 "	56060	" "	"	32.00 gpm.	
02:00 AM	57020	" "	"	32.00 gpm.	
02:30 "	57005	" "	"	31.50 gpm.	
03:00 "	57935	" "	"	31.00 gpm.	
03:30 "	58865	" "	"	31.00 gpm.	
04:00 "	59815	" "	"	31.33 gpm.	
05:00 "	61725	" "	"	31.83 gpm.	
	62665	" "	"	31.33 gpm.	
	63603	" "	"	31.26 gpm.	
	6533	" "	"	31.00 gpm.	

End of Test -
July 27, 1957

Neotoma

Form 10-771
(Rev. 12-56)UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
MONTHLY PROGRESS REPORTArea George Washington Carver NM

CHECK BELOW THE PROJECT USED:

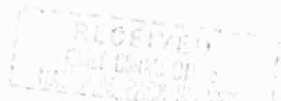
☐ BUILDINGS AND UTILITIES☐ NPS ROADS AND TRAILS☐ BPR ROADS AND TRAILS

REPORT FOR (Month and year)

June, 1957

F. Y. PRO- GRAM	WORK ORDER NUMBER, LOCATION WITHIN AREA, AND PROJECT TITLE	PCP NO.	DRAWING NO.	CONSTRUCTION		ESTIMATED DATE STARTING COMPLETION	% COM- PLETE	REMARKS AND CONSTRUCTION AGENCY: (D & C), (R), OR (A)
				AMOUNT ALLOTTED AND DATES	CON- TRACT (C) OR DL			
1	2	3	4	5	6	7	8	9
	Water Supply Well Contract No. 14-10-232-186	U 2-1	None	\$15,000	0	4/23/57 6/27/57	100	Eastern Office of Design and Construction Performance and Payment Bond submitted on February 15, 1957. Notice to proceed was mailed to contractor on March 30. Receipt of notice to proceed acknowledged as of April 3. Performance began on April 23. On May 28, 422 feet of 6 inch casing in a 10 inch bore was placed in the well. On May 29, the contractor began drilling with a 6 inch bit and ceased drilling on June 13. The well was sealed or grouted on June 14 by the Halliburton Company, a sub-contractor. A 16-hour pumping and draw-down test began on June 26 and was completed satisfactorily on the next day. A test for plumbness was made the same day. Performance by the contractor was completed June 26, several days before expiration of the contract date. A chemical analysis of water samples have been made and the water has been determined to be noncorrosive. The depth of the well was found to be 852 feet. The Roubidoux formation, the aquifer for this well, was reached at 805 ft. Performance by the contractor has been very satisfactory.

D 5039



George Washington Carver National Monument
Diamond, Missouri

1957 JUL 23 AM 8:35

Handwritten: List
D E C U

Memorandum

July 23, 1957

To: Chief, BODC
From: Superintendent, George Washington Carver NM
Subject: Well Record

INVOICE OF DESIGN AND CONSTRUCTION
JUL 29 1957
VICE MANAGER 1 <i>[initials]</i> CLERK SULLIVAN
USG FILES RECORDS FILES

This is in reply to Mr. Zimmer's memorandum, dated July 15, 1957, requesting that accomplished forms of RECORD OF WELL be supplied to BODC, the Director's office and the Region Two Office.

A limited supply of the subject forms were provided by Region Two Office and have been executed by Mr. Previne. The accomplished, signed form is attached.

(Sgd.) Clarence H. Schultz

Clarence H. Schultz
Superintendent

Attachment

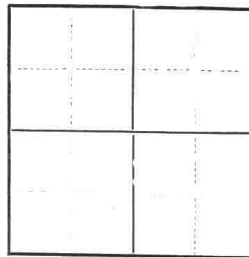
Distribution: Director, with RECORD OF WELL
Region Two Office, with RECORD OF WELL

Handwritten: GWA

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

RECORD OF WELL

1. Location: State Missouri County Newton
Nearest P. O. Diamond, Missouri Direction from P. O. West
1/4 sec. 7, T. 26 N, R. 31 W.
United States
Department of Interior
National Park Service
2. Owner: George W. Carver National Monument Address Diamond, Missouri
Driller: GEORGE PROVINE DRILLING CO. Address Box P.O. Box 493 - Monett, Missouri
Site selected by: _____ Address _____
3. Situation: Is well on upland, in valley, or on hillside? Upland Bucyrus-Erie
Drilled Cable Tool Rig, (solid)
4. Type of well: _____; kind of drilling rig used _____
(Solid tool, jetting, rotary, etc.)
5. Depth of well: _____ ft.; year in which well was finished Lime, Flint,
830 driven, bored, or drilled. (Solid tool, jetting, rotary, etc.)
Does well enter rock? yes; if so, at what depth? 5 ft.; kind of rock shale, Sandstone
6. Depth to water: 51 feet ft.; Amount water rose above level where first struck _____ ft.
10 inch hole to 423 feet - 6 inch hole to total depth.
7. Diameter: At top _____ inches; at bottom _____ inches.
8. Principal water bed: Swan creek SS. Roubidoux SS.
(Gravel, sand, clay, or rock. If rock, state kind.)
Depth to principal water bed 805 ft.; thickness of bed 45 ft.
If other water supplies were found, give depth to each Swan Creek Sandstone formation
9. Casings: Kind 19.45#/ft.; size 6" id.; length 423 ft.; between depths of 0' and 423 ft.
Kind _____; size _____; length _____ ft.; between depths of _____ and _____ ft.
Kind _____; size _____; length _____ ft.; between depths of _____ and _____ ft.
Packers (if any): Depth at which packers were used none; kind none
Screen or Strainer: Was well finished with screen or perforated pipe? none; kind of screen none;
length of screen _____ ft.; diameter _____ inches; size of openings _____
perforated pipe; size of perforations none; How were perforations made: burned, drilled? _____
10. Head: Does well at present overflow without pumping? no; did it overflow when new? no
11. Pump: Is the well was test pumped for 30 to 37 gpm @ 200 foot pump setting. _____;
size or capacity of pump _____; kind of power electric - submersible.
12. Yield: Natural flow at present (if any) _____ gallons per minute; original flow _____ gallons per minute;
well has been pumped at 30 to 37 gallons per minute continuously for 16 hours;
quantity of water ordinarily obtained from well 25 to 35 gallons per minute
13. Use: For what purpose is the water used? Domestic (George Wasington Carver Monument)
14. Quality of the water: very good. medium soft.; is there an analysis? yes
(Hard or soft, fresh or salty, etc.)
- Name of person filling blank GEORGE PROVINE DRILLING COMPANY
BY [Signature]
Date July 20, 1937 Address box 493 - Monett, Missouri



On the back of this sheet give the record of the beds through which the well passes and any other facts not given above.

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LOG OF WELL

KIND OF ROCK OR OTHER MATERIAL (Give color and tell whether hard or soft)	DEPTH, IN FEET		THICKNESS, IN FEET	REMARKS (Especially information as to water found)
	From—	To—		
Surface Soil; Gray & Yellow Chert; Red Clay	0	5	5	Soft.
Gray & Yellow Chert; Red Clay	5			soft clay.
Light Brown Lime.		15		medium hard.
Light Brown & Gray Lime; Gray, dark gray, bluish & mottled chert.	15	45	30	medium hard.
Gray & Brown Lime; Gray Chert; trace of Green Shale.	45			
Bluish Chert, mottled chert		125	80	medium hard.
Dark Brown Lime; Trace Gray Chert. Oolite.	125	130	30	soft
Gray & Brown Lime; Gray & Yellow Chert.	130	170	40	medium hard.
Gray Lime; Some Black Shale (Chattanooga) @ 200/210 ft.)				
Bluish Gray & Mottled Shale Flint				
Trace of Marcasite.	170	210	40	hard.
Brown & Gray Lime; Some Gray & Mottled Chert; Bluish Gray Flint.	210	245	35	hard.
Gray, Light Gray, Bluish & some Gray mottled chert; Dark brown Lime.	245	255	10	STRONG WATER.
Gray, Blue, Mottled Chert; Gray & Brown Lime.	255	340	185	hard.
Greenish, Gray & Brown Lime; Blue Chert; Dolomite Crystals trace of marcasite.	340	350	10	medium hard.
Light Brown & Brown Lime; Some Blue Chert; light Gray Salvage trace of dark gray shale.	350	360	10	medium hard. some shale probably caving
Gray, Light Brown & Greenish Gray Limestone; trace of marcasite. Translucent High Flint, trace of gray shale	360	375	15	medium hard (some water)
Brown & Gray Lime; trace of Gray chert;				
Brown & Gray Lime; Some Gray Chert; Some Sandy Chert.	375	390	15	hard.
Light Brown Lime; Light Gray Salvage; in some gray chert; Black Shale	390	400	10	hard & medium hard.
Brown & Light Brown Lime; Gray Lime; Blue, Gray & some Brown Chert; very little White Chert.	400	435	35	~~XXXXXXXXXXXXXXXXXXXX~~ hard to medium hard.
Light Brown Lime; trace of green shale				
Trace of some White & Gray Chert	435	460	35	hard drilling.
Light Brown Lime; Some Dark Brown Lime				
Trace of Grayish-brown Shale	460	480		chattanooga shale.

PAGE

GEORGE WASHINGTON CARVER MEMORIAL
UNITED STATES Department of the
Interior - National Park Service.
(Diamond, Missouri - Water Well.

Kind of Rock or Other Material	Depth		Thickness	Remarks
	From	To		
Dark Brown Lime; Semi-translucent Chert; Gray & some White & Yellow Chert.	480	535	55	very hard.
Light Brown Lime; trace of White Chert; Gray Selvage; Some small amount of Bray & White & Blue Chert.	535	595	60	hard.
Brownish-Gray, Gray & Brown Lime; Dark Brown Lime; Light Brown Selvage; Some Gray & Light Gray Chert; Some Blue-gray Chert; Trace of Selvage (could be caving slightly)	595	805	210	hard to medium hard.
Light Grayish brown Selvage. Gray & Brown Limey Sandstone	805	850	45	Roubidoux formation. (medium tight)

GEORGE PROVINE DRILLING COMPANY

P.O. box 493

Monett, Missouri

BY: W. J. HowellDocket Information

Number of Documents in Docket 16

Documents Dated from 6/15/1957 to 6/3/1964

Docket Compiled: 4/11/2011