



WATER-RIGHT DOCKET

Joshua Tree National Park

Docket No: 2

SMOKE TREE WASH WELL, COTTONWOOD AREA.

Preliminary Docket Information

08-16-1973: water right/source docket information

WATER RESOURCES/WATER RIGHTS

DATE: August 16, 1973

WATER RIGHT/SOURCE DOCKET INFORMATION

REGION Western Region AREA Joshua Tree National Monument

SITE Smoke Tree Wash Well, Cottonwood Area

STATE California COUNTY Riverside DOCKET NO WR #2

LOCATION SE 1/4, SW 1/4, SE 1/4, Sec. 27, T4S, R11E

REGIONAL BASIN _____ LOCAL BASIN _____

ACQUIRED BY Drilling

APPLICATION _____ PERMIT _____ CERTIFICATE _____

ACTION DUE _____ PRIORITY _____ RESERVATION August 10, 1936

QUANTITY _____ USE _____

STATUS _____ SOURCE Well

REMARKS The U.S. Geological Survey designation for this well is the "Cottonwood Well",

#48/11E 27Q1 Hydrologic unit # 18100/00

NARRATIVE: This 400' well, owned by the National Park Service, was drilled in the Summer and Fall of 1958. Nothing in the docket indicates that a permit was requested from the State before the well was drilled.

Compiled by Wm. N. Murray

Approved by W. Werrell

100 1

Joshua Tree National Monument
Water Right #2
Outline of Assembly - Correspondence

1. Memorandum to Regional Director from Chief Water Resources, February 17, 1958
2. Memorandum to Regional Director from Chief Water Resources, March 17, 1958
3. Memorandum to U.S. Geological Survey from Regional Chief of Operations, October 2, 1958
4. Memorandum to Regional Director from Chief Water Resources, October 15, 1958
5. Memorandum to Regional Director from Chief Water Resources, November 7, 1958
6. Memorandum to Director from Regional Chief of Operations, November 12, 1958
7. Memorandum to Regional Director from Chief Water Resources, January 7, 1959
8. Memorandum to Regional Director from Superintendent, January 9, 1959
9. Memorandum to U.S. Geological Survey from Acting Regional Chief of Operations, January 16, 1959
10. Memorandum to Superintendent from Regional Chief of Operations, January 30, 1959
11. Memorandum to Regional Director from Chief Water Resources, March 6, 1959
12. Memorandum to Regional Director from Superintendent, March 10, 1959
13. Memorandum to Director from Acting Assistant Regional Director, June 29, 1959
14. Memorandum to Director from Acting Assistant Regional Director, June 29, 1959
15. Memorandum to Regional Director from Chief Water Resources, July 29, 1959
16. Memorandum to Regional Director from Supervisor Mails and Files, August 25, 1959
17. Memorandum to Superintendent from Chief Accounting Operations, September 17, 1959
18. Memorandum to Chief From Regional Chief of Operations, September 23, 1959
19. Memorandum to Superintendent from Regional Chief of Operations, September 23, 1959
20. Memorandum to Director from Assistant Regional Director, October 13, 1959

21. Memorandum to Superintendent from Acting Regional Chief of Operations,
December 14, 1959
22. Memorandum to Regional Director from Superintendent, December 15, 1959
23. Memorandum to Regional Director from Chief Water Resources, January 14, 1960
24. Memorandum to Director from Assistant Regional Director, November 1, 1960
25. Memorandum to Regional Director from Chief, November 7, 1960
26. Memorandum to Superintendent from Assistant Regional Director, December 15, 1960



UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
Region Four

December 15, 1960

orig. in
L1425 and L54
CR

W O D C
DEC 16 '60
CHF
ADM
PERO
P & P
ARCH
ENG
L.A.
SPEC
CONT
SFTY
ACTION TAKEN - DATE

Memorandum

To: Superintendent, Joshua Tree
From: Assistant Regional Director
Subject: Winona Placer Claim

This has reference to your memorandum of November 16 (L54) on the above subject. We note your comment:

"The investigation of the Winona claim was carried on and completed resulting in an adverse action by the Bureau of Land Management. An appeal was made, and the hearing held this summer. We have had no official ruling on the case, but were told by officials of BLM that the appeal was very weak and they felt sure the decision would be upheld."

We suggest that you write the BLM officials and ask if a decision has been rendered. Quite apart from water uses, it is important that the claim be acquired. If it is finally declared invalid, then it will remain in the ownership of the United States. Actual land title in an unpatented claim is in the United States until patent is secured.

Assistant Regional Director

Copy to: Director, with copy of incoming
WODC (2) ✓

FILE COPY

WJ

November 7, 1960

154

Marley
Bressler
H. H. Hill
H. H. Hill

Memorandum

To: Regional Director, Region Four
From: Chief, WODC
Subject: Klingfiet's Winona Placer Claim, Joshua Tree National Monument

Reference is made to the memorandum of November 1 to the Director signed by Mr. Maier concerning possible acquisition of the subject property. The last paragraph of the memorandum requests the comment of this office regarding statements made therein.

It is our understanding that the test well at Smoke Tree Wash produced a flow of about 40 gpm when tested, which flow should be sufficient for the development planned at the Cottonwood area with adequate storage provided.

Accordingly, we concur with the statements made in the second paragraph and the paragraph enumerated "Paragraph 5" of Mr. Maier's memorandum that the water from Cotton Spring and the land within the subject claim will not be required for the currently contemplated development.

(Sgd.) Sanford Hill

Sanford Hill
Chief, WODC

In duplicate

Copy to: Supt., Joshua Tree

Informational to: Springer, Alleman, Riddell, Montgomery, Kuehl

DSMarley:jh

FILE COPY

Paragraph 4 - The relative locations of alternate campground sites, springs and well are, in our view of the situation, substantially the same as noted by Mr. Dunn although we understand the Superintendent has recently recommended the more southerly site for development. We, too, have no record of conflicting private interests (with the possible exception of the Winona claim).

Paragraph 5 - We agree with Mr. Dunn that the priority for the acquisition of the Winona Flaser Claim is contingent upon development plans and that if the land is needed it should be programmed for general inholding land acquisition. In this regard we understand that development plans now in progress at WODC do not require the Winona Claim either for the land or for the water.

In summary, we agree with Mr. Dunn's statement in his October 24 memorandum that the development seems to be of no further concern to the Water Resources Section. Nevertheless, should it be the case that the existence of the privately held Winona Claim would detract from the planned development and the owner is willing to sell we certainly would have no objection to the use of water right acquisition funds for this purpose.

We are sending copies of this memorandum to the Superintendent and to WODC for comment should our foregoing assumptions and conclusions require modification.

(000) HERBERT WATERS

Assistant Regional Director

Copy to: Supt., Joshua Tree
Chief, WODC (2) ✓



UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON 25, D. C.

January 7, 1959

Memorandum

To: Regional Director, Region Four

From: Chief, Water Resources Section

Subject: Test Well, Docket 2, and Possible Acquisition of the Klingbiel's
Winona Placer Claim, Cottonwood Area, Joshua Tree

I have filed the carbon copy of Mr. Johnston's memorandum of November 12, and supporting Drawings NM-JT-2101 and 2079 in our assembly of Docket 2, under the cost statement for Contract 14-10-434-247. Similar prints should be supplied for the docket assemblies in your office, the Monument, and WODC.

On return from annual leave, I have found that our 1960 M&P estimates for Investigations have been reduced by approximately \$82,000 to the \$61,500 provided for 1959. This means that the Regional Hydraulic Engineering expenses will have to be largely financed from the Construction funds for Acquisitions, approximately as they are during 1959. This will in turn reduce the Construction funds for actual 1960 acquisitions by the same amount.

Under Work Order 12-WR-59 you have been authorized to obtain the mineral examination of the placer claim. However, it is now clear that any subsequent acquisition will have to be deferred until at least 1961, or financed as a standard inholding land acquisition.

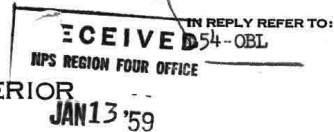
It is also noted on Drawing 2079 that there are both Cotton Spring on the placer claim, Cottonwood Spring about half a mile to the south, and that both are considerably to the south of the southern of the two alternative campground sites. It is also noted that the test well and northerly campsite alternative are a mile and a half further to the north, and we have no record of conflicting private interests.

After obtaining the mineral examination as authorized by Work Order 12-WR-59, I believe that a much more definite plan for the campground is needed to define the priority for the acquisition of the Winona Placer Claim. I also believe that it should be programmed for general inholding land acquisition.

A. van V. Dunn
A. van V. Dunn

Chief, Water Resources Section

Copy to: Superintendent, Joshua Tree
Chief, WODC



REG. DIR.	ASST. R.D.	OPERATIONS	ADMIN.	RECREATION	INVEST.	LEGAL

W. Johnston
2/10

action has been taken 12/18/58

reported by memo of 1/30 to Supd.

revised estimates submitted 1/15

L54

November 12, 1958

Memorandum

To: Director

From: Regional Chief of Operations, Region Four

Subject: Acquisition of Land and Rights, Cottonwood Area,
Joshua Tree

Mr. Dunn asked by memorandum of October 10 for an explanation of the relative locations of the Winona placer claim, the well being drilled on Federal land and the places where the water is to be used.

Attached are drawings NMFT 2101, well location, and NMFT 2079, Winona and Mastodon Claims. The first drawing shows the relative locations of water sources and places of use. The latter drawing shows details of the Winona Claim. The well appears to be in the SE-1/4, SE-1/4 of unsurveyed section 27, T4S, R1E, S8M and was located by a stadia traverse from 29th Engineers triangulation point "Staff". A hand compass bearing to the well from the found SE corner of section 34 is shown. The distance from the latter corner was not measured. Sites which have been suggested for the proposed Cottonwood campground are shown in red. The site for the Cottonwood Ranger Station, as well as the campground, has not been selected.

(SGD) FRED T. JOHNSTON

Fred T. Johnston
Regional Chief of Operations

Attachments

Copy to: Supt., Joshua Tree (w/attachments)
Chief, WOBC

*copy made of mem only
region*

WESTERN OFFICE	
DESIGN & CONSTRUCTION	
NOV 13 1958 A.M.	
CHIEF	
ADMIN. ASSIST.	
PERSONNEL	
PLANS & PROG.	
SAFETY	
ARCHITECT	
ENGINEER	
LAND ARCH.	
ACTION TAKEN—DATE	

Supporting Hydro Data

See Docket
JoTR - 0001

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Ground Water Branch

GROUND WATER AND RELATED GEOLOGY OF
JOSHUA TREE NATIONAL MONUMENT, CALIFORNIA

By

J. E. Weir, Jr., and J. S. Bader

Prepared in cooperation with the
National Park Service

OPEN-FILE REPORT

Long Beach, California
July 15, 1963

Table 2.--Data on water wells and springs in Joshua Tree National Monument, Calif.--Continued

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T. 4 S., R. 11 E.--Continued

4/11-10E1	GS	11-15-61	Ruby Lee well	-	12.5	D 48	B H	-	Dm	Tc	0	2,935	12.4	-
27Q1	GS	10-26-61	Cottonwood well	1958	403	C 12	N N	45	U	Tap	1.0	2,975	170.43	C, L, W

T. 5 S., R. 11 E.

5/11-14CS	GS	12- 1-61	Cotton Spring	-	10.0	D 180	NN	F	Dm	-	-	3,050	-	-
14LS	GS	10- 9-61	Cottonwood Spring	-	-	-	NN	F	Dm	-	-	2,950	-	C
14PS	GS	11-14-61	Wood Spring	-	-	-	NN	F	W	-	-	2,890	-	-

T. 5 S., R. 12 E.

5/12-	9AS	GS	11-15-61	Conejo Spring	-	-	-	-	N N	D	-	-	-	3,850	-	-
	20N3	GS	11-15-61	Lost Palms Springs	-	-	-	-	N N	F	Dm	-	-	3,300	-	-
	28S3	GS	11-28-61	-	-	-	-	-	N N	F	Dm	-	-	2,850	-	c/
	29DS	GS	11-28-61	-	-	-	-	-	N N	F	Dm	-	-	3,115	-	-

See footnotes at end of table.

Copy

Copy

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Water Resources Division
Ground Water Branch
221 Redondo Avenue
Long Beach 3, California

March 2, 1959

Mr. W. R. Supernaugh, Superintendent
Joshua Tree National Monument
Twentynine Palms, California

Dear Mr. Supernaugh:

Transmitted herewith is an ozalid copy of the chemical analysis of the water sample obtained from the Smoke Tree Wash well (well number 4S/11E-27Z1).

According to this analysis the water is of good chemical quality except that the concentration of fluoride is 2.7 parts per million(ppm). This is above the maximum of 1.5 ppm usually recommended by the U. S. Department of Public Health for drinking water.

Very truly yours,

For the geologist in charge

/s/ John S. Bader
Geologist

JSB/lm
Encl.

C

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P

Y

GROUND WATER ANALYSES ON SMOKE TREE WASH WELL
BY THE DEPARTMENT OF WATER RESOURCES

Lab/Field No. J-3025 450
 Sampled By J. S. Bader
 Date Collected 12-4-58
 Date Analyzed 1-30-59

Constituents in	epm	ZRV	ppm
Cations: Ca	1.79		36
Mg	6.67		8
Na	1.82		41
K	0.05		1.9

Total Cations	4.33		
Anions: CO ₃	0		0
HCO ₃	2.33		142
SO ₄	0.48		23
CL	1.24		44
NO ₃	0.06		4
F	0.142		2.7

Total Anions	4.11		
Balance			
Boron			0.20
Silica			24

Total Solids/Sum	314		
Per Cent Sodium		42	
Hardness: Total/NC	123		

Laboratory/Chemist	Term	SD
--------------------	------	----

Remarks: 1. Clear. Water bearing formation - Alluvium P.C. Pump Test discharge

NARRATIVE STATEMENT
TEST WATER WELL
SMOKE TREE WASH, COTTONWOOD AREA

In December 1957 Superintendent Fladmark requested a water investigation, including test drilling to locate a water source, in the Cottonwood Area. Such an investigation was needed before planning could proceed for the development of the area.

Water resources investigation funds were made available and specifications were prepared in the Regional Office combining the recommendations of the USGS Ground Water Branch, WDC, and a local well driller. A contract was awarded June 16, 1958 to Clifford Saffdy of Joshua Tree who submitted a low bid of \$4,990.00. The other two bids were by R. E. Anderson, Lakeside, \$7,796, and Roscoe Moss, Los Angeles, \$10,366.00.

The final well site was selected by the Geological Survey at a point above an indication of a bedrock barrier across Smoke Tree Wash. A report on the brief USGS reconnaissance of the Cottonwood area was submitted October 8, 1958 by John S. Bader.

Drilling started July 18, (was interrupted six weeks while the contractor drilled another well) and the original contract depth of 300 feet was reached on October 8. Water had been reached at 215 feet after which the water rose in the bore to the 171.5 foot depth. The 12-inch casing became stuck at the 231 foot depth, the contractor having experienced difficulties with boulders. The bore still being in alluvium, Extra Work Order No. 1 was issued directing the contractor to drill an additional 100 feet, or until bedrock was reached, and to use 10-inch casing below the 231 foot depth. Drilling and casing was completed to the 400 foot depth November 6, the bore still being in alluvium. It was the contractor's opinion that most of the water was entering between the 215 and 230 foot depths with possibly more water at 285 to 305 feet deep.

The 12-inch casing was perforated from the 212 to the 228 foot depth using a Mills knife. The 10-inch casing was torch pre-perforated from 5 feet above bottom to the top of the lap with the 12-inch casing. Following perforating, the well was swabbed and bailed for 24 to 28 hours.

A test pump, belt driven by a gasoline engine was installed and prior to the arrival of the Government inspector, the contractor pumped and surged for 14 1/2 hours. Test pumping started December 1 under the supervision of the writer but had to be stopped because of malfunctioning of the electric sounder. The contractor installed an airline which he immediately lost into the well as the pump was being replaced. The pump test resumed on December 3, the drawdown being

measured by tape and by electric sounder and the discharge by timing the filling of a five gallon bucket. Test pumping continued for 30 hours during which frequent measurements were made of discharge and drawdown. Although accepted, the pump test was not completely satisfactory because of erratic discharge rate and difficulty in making reliable water level measurements. The engine could not be made to drive the pump at a uniform rate but raced at times or faded away to no flow. The electric sounder apparently hung up at the junction of the 10 and 12-inch casings and frequently got stuck probably around the 1/4 inch pipe airline dropped into the well. However, by plotting the trends of the few good readings it was possible to use the pump test to determine the capacity of the well.

Upon completion of the pump test, the contractor pulled the pump and fished out all the gear dropped in the well. The site was cleaned up and the well accepted by Superintendent Supernough December 9, 1958.

The well is satisfactory as a water source for the Cottonwood area. It can be pumped continuously at a maximum of 46 gallons per minute at which rate the water level would be drawn down to 341 feet below ground surface. However, it would be more efficient to limit the pumping rate to about 35 GPM to decrease the amount of sand drawn into the well and to reduce the drawdown to 247 feet below the ground surface.

The water is clear and of agreeable taste. According to a chemical analysis made by the USGS (sample collected 12-4-58) the water is of good chemical quality except that the concentration of fluoride is 2.7 parts per million. This is above the maximum of 1.5 ppm usually recommended by the Public Health Service for continuous use by children.

The costs of supervision and USGS investigation are not included in the costs shown on the completion report form. These additional costs paid from Washington or Region Four investigation and construction funds are:

USGS investigation, WAGO, about	\$200.00
Preparation of Specifications and	
'Bid Papers, Region Four	400.00
Supervision (including travel) by Spaulding	750.00
Preparation of Reports by Spaulding	100.00
Total additional cost	<u>\$1,450.00</u>

The driller's reports, final estimates, chronological dates, test and capacity curves, and other data relating to the well were mailed January 30, 1959 for filing in the several Water Right Docket 2 assemblies. Detailed notes are recorded in Joshua Tree field books 8 and 13.

Linna S. Spaulding
 Linna S. Spaulding
 Hydraulic Engineer

March 17, 1959



UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

Joshua Tree National Monument
Twentynine Palms, California

October 16, 1958

Mr. Clifford Saffy
Joshua Tree, California

Contract No. 14-10-434-247
CHANGE ORDER NO. 1

IN REPLY REFER TO

L-54

RECEIVED
JOSHUA TREE NATL MON

OCT 17 1958

SUPP.	
ADMN.	
INTER.	
PERFEC.	
MAINT.	
PROVISE.	

Dear Mr. Saffy:

Under the above numbered contract you have completed the drilling of 300 feet of well, the maximum depth provided for in the Specifications. The 12-inch casing which you have installed to a depth of 231 feet has become too tightly lodged in the ground to permit driving to the depth specified without damage to the casing. It has been determined to be in the interest of the United States to continue drilling to a greater depth and to substitute 10-inch casing below the depth to which 12-inch casing has been placed. Therefore, in accordance with the provisions of Article 3 of your Contract No. 14-10-434-247, dated June 16, 1958, you are hereby directed to perform the following changed and extra work:

1. Furnish all necessary labor, equipment and materials to drill and case an additional one hundred feet of well or until bedrock is reached, whichever is the lesser.
2. Furnish and install 10-inch casing from the bottom of the installed 12-inch casing to the final bottom of the bore.

Ten-inch nominal inside diameter steel casing shall weigh not less than 25.1 pounds per lineal foot and shall have a wall thickness not less than 0.25 inch. The 10-inch casing shall lap the 12-inch casing by 10 feet and the upper end of the 10-inch casing shall be expanded to make a tight fit with the 12-inch casing. Prior to the placing of the 10-inch casing the outer 12-inch casing shall be perforated for the length of the lap unless otherwise directed by the Contracting Officer.

The 10-inch casing shall be perforated as directed by the Contracting Officer after the bore has reached the final depth. The Contractor may at his option and risk drill an open hole in which case he may perforate the casing with a running torch prior to installation.

The 10-inch cased section of well shall be tested for roundness and alignment as specified in the original contract except that the test shall be made with a section of pipe forty (40) feet long and 8.625 inches outside diameter or with a dummy of the same length and diameter.

All work shall be performed in accordance with the applicable provisions of your contract specifications, or as otherwise directed by the Contracting Officer.

As this change order changes the quantities shown in the bid schedule and adds work not included in the bid schedule, you will be compensated in accordance with unit prices as follows:

1. The estimated quantity of bid item 3 is reduced from 300 to 231 lin. ft. reducing the contract by 69 lin. ft., @ \$4.50 per lin. ft. \$310.50
2. The following items shall be added to the bid schedule

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Item</u>	<u>Unit Price</u>	<u>Amount</u>
8	100	Lin. ft., drilling below 300-foot depth at nine dollars per lin. ft.	\$9.00	\$900.00
9	69	Lin.ft., 10-inch casing from bottom of 12-inch casing to 300-foot depth installed at three dollars and fifty cents per lin. ft.	3.50	241.50
10	100	Lin. ft., 10-inch casing below 300-foot depth installed at four dollars and fifty cents per lin.ft.	4.50	450.00
Total items 8, 9 & 10				1,591.50
Less decrease in item 3				310.50
Increase - Change Order No. 1				1,281.00

This change order will change your contract price as follows:

Original amount of contract	\$4,990.00
Change Order No. 1	1,281.00
Revised amount of contract	\$6,271.00

The above compensation is agreed to be full payment for all work required by this change order.

Measurement of casing for payment will be based on the number of lineal feet of cased well in place at the time of acceptance of work with no duplication for lapped casings.

Except as provided above, there shall be no change in any unit price of the original contract as a result of this change order and the payment provided for under items 8 and 10 shall be in compensation for the increased depth at which the development work and test pumping shall be done.

An allowance of 30 days will be made because of the extra work and your completion date is changed accordingly to November 28, 1958.

1. This extra work was not contemplated at the time of the original contract.
2. The proposed additional work is an inseparable part of the work being performed under this contract.
3. The extra work is of such nature as to make it reasonably impracticable of performance by other than the original contractor.
4. The modification herein proposed is in the interests of the United States because the drilling to the contract depth has revealed that water bearing soil exists at the present depth and a well with greater yield could be had by drilling deeper. These conditions could not be foretold. The extra work below 300 feet is to be performed at the same unit prices applying to the well from the 200 to 300 feet depth.

Very truly yours,


William E. Supernault
Superintendent

Joshua Tree National Monument
Twentynine Palms, California

October 22, 1958

RECEIVED	
REGION FOUR OFFICE	
OCT 23 '58	
MR. DIR.	
ASST. DIR.	
OPERATIONS	
ADMIN.	
VEGETATION	
INSTR.	
LABOR	

Mr. Clifford R. Saffdy
Joshua Tree, California

Subject: Contract No. 14-10-434-247 - Test Well, Cottonwood Area

Dear Mr. Saffdy:

Under Contract No. 14-10-434-247, you drilled a hole to 300 feet deep. The twelve-inch casing is reported to be jammed at 231 feet deep. Under Change Order No. 1, you have been directed to drill to a total of 400 feet deep, or until bed rock is reached. Ten-inch casing is to be installed below the 231 feet depth.

You are directed to perforate the 10-inch casing starting five feet above the bottom, and perforate continuously to the upper end of the lap with the 12-inch casing which has previously been perforated. Slots shall be 4-inches long with an 8-inch longitudinal space between slots. There shall be eight rows of slots staggered circumferentially around the casing. Slots shall be approximately 1/8-inch in width but in no case shall be wider than 3/16-inch. Slots may be cut with a torch prior to installation of the casing.

Sincerely yours,

W. R. SUPERINTENDENT

W. R. Superintend
Superintendent

Copy to: Region Four (2) ✓
WASO
Chief, WDC
Mr. Fred Dunkel, USGS

ORIGINAL
File Original, Duplicate and Triplicate with the
REGIONAL WATER POLLUTION

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

STATE OF CALIFORNIA

Do Not Fill In

No 26288

State Well No. _____

Other Well No. _____

CONTROL BOARD No. _____
(Insert appropriate number)

(1) OWNER:

Name U.S. DEPARTMENT OF INTERIOR
Address Joshua Tree National Monument
Twentynine Palms, Calif.

(2) LOCATION OF WELL:

County Riverside Owner's number, if any—
R. F. D. or Street No. _____

Approx. 3 miles NE of Cotton Wood
Springs, turn west at Lions Rock
about 2 miles S.W. Direction

(3) TYPE OF WORK (check):

New well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐

If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic ☒ Industrial ☐ Municipal ☐
Irrigation ☐ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☐
Cable ☒
Dug Well ☐

(6) CASING INSTALLED:

SINGLE ☐ DOUBLE ☐

From	ft. to	ft.	Diam.	Gage or Wall	Diameter of Bore	from ft.	to ft.
0	232	12	3/4	1			
208'9"	402'9"	103	1/2	1			

Type and size of shoe or well ring Std Drive Size of gravel:
Describe joint welded

(7) PERFORATIONS:

Type of perforator used Knife, Mills type, Torch
Size of perforations 5/32 preperforated 4 ft. in.
From ft. to ft. Perf. per row Rows per ft.
212 228 8 1
209 398 8 2

(8) CONSTRUCTION:

Was a surface sanitary seal provided? ☐ Yes ☒ No To what depth _____ ft.
Were any strata sealed against pollution? ☐ Yes ☒ No If yes, note depth of strata _____
From ft. to ft. _____
not necessary
Method of Sealing _____

(9) WATER LEVELS:

Depth at which water was first found 171' 6" ft.
Standing level before perforating 171' 6" ft.
Standing level after perforating 171' 6" ft.

(10) WELL TESTS:

Was a pump test made? ☒ Yes ☐ No If yes, by whom Engineer for Park Service & Contractor
Yield: 45 gal./min. with 85 ft. draw down after 20 hrs.
Temperature of water 70 Was a chemical analysis made? ☐ Yes ☐ No
Was electric log made of well? ☒ Yes ☒ No

(11) WELL LOG:

Total depth 402' 9" ft. Depth of completed well 402' 9" ft.

Formation: Describe by color, character, size of material, and structure.

1	60	sand gravel
60	115	boulders clay content
115	135	sand clay content
135	178	Clay-Boulders
178	183	Pure clay
183	215	Boulders Clay very rough
215		water showed
215	231	Boulders Clay
231	285	Gravel boulders, Clay co.
285	305	possible more water, soft
305	403	clay, some gravel cont

Work started 7/17 19 58, Completed Dec. 6 19 58

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Clifford Saffdy
(Person, firm, or corporation) (Typed or printed)

Address Box 116

Joshua Tree, Calif.

(SIGNED) Clifford Saffdy
Well Driller

License No. 115011 Dated Dec. 8, 19 58

95689 3-54 SOM QUIN © SPO

DWR FORM NO. 246 (REV. 3-54)



UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

File 1.34

Joshua Tree National Monument
Twentynine Palms, California

December 9, 1958

Superintendent
Wm. R. Supernough
National Park Service, Dept. of Interior
Joshua Tree National Monument
P.O. Box 875
Twentynine Palms, California

Account No. 134.1, Contract No. 14-10-434-247, Clifford H. Saffdy,
P.O. Box 116, Joshua Tree, California

Furnishing all labor and material for drilling of a test water well
in the Cottonwood Area, Joshua Tree National Monument,

ESTIMATE NO. 1 - Complete and Final Estimate

Original Amount of Contract \$4,990.00
Deepen Test Well under Work Order No. 13-WR-59 1,261.50
\$6,251.50

Amount due Contractor, Estimate No. 1 (final) \$6,251.50

Breakdown of Estimate No. 1

Item No.	Quantity	Item	Unit Price	Amount
1.	200 lin. ft.	Drilling 0 to 200 ft.	\$10.00	\$2,000.00
2.	100 " "	" 200 to 300 ft.	9.00	900.00
3.	232 " "	12-inch casing	4.50	1,044.00
4.	8 hrs.	bailing test	12.50	100.00
5.	10 hrs.	developing well	10.00	100.00
6.	1 each.	furnish and set test pump	300.00	300.00
7.	36 hours	pumping test	6.00	216.00
8.	100 lin. ft.	drilling below 300 ft. depth	9.00	900.00
9.	69 lin. ft.	10-inch casing 231 to 300 ft.	3.50	241.50
10.	100 lin. ft.	10-inch casing below 300 ft.	4.50	<u>450.00</u>

Total . . . \$6,251.50

All the work on this contract was completed on December 5, 1958, and
original contract expired November 28, 1958. Completion of contract was
extended 18 days from Nov. 28 to Dec. 16, 1958.

Approved Wm. R. Supernough Date 12/9/58
Wm. R. Supernough, Supt.

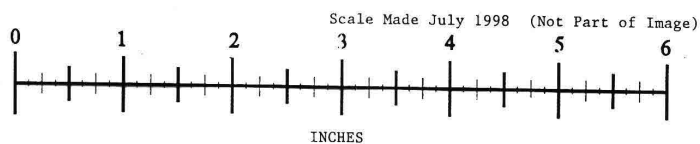
January 16, 1959

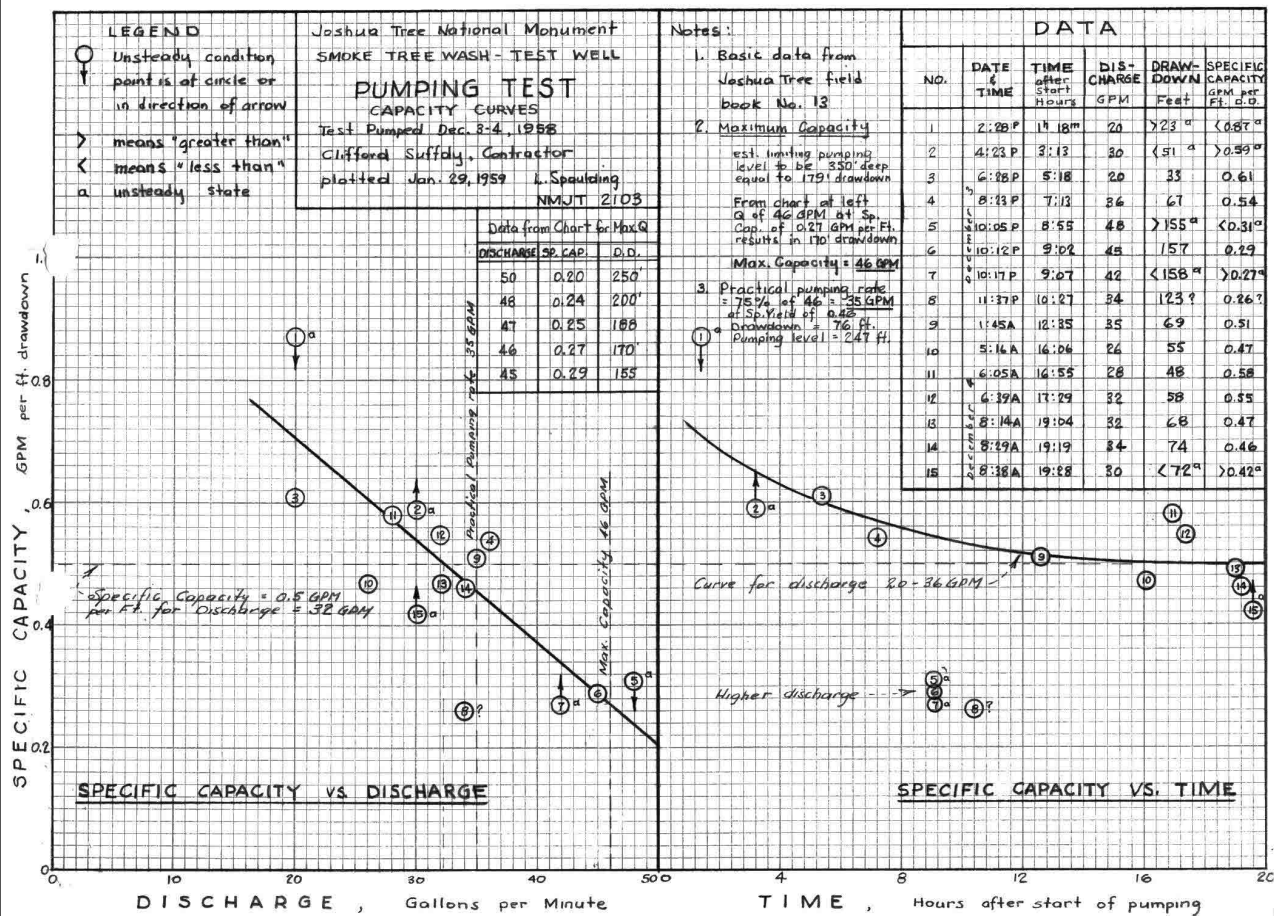
JOSHUA TREE NATIONAL MONUMENT
SMOKE TREE WASH TEST WELL
CHRONOLOGICAL DATES

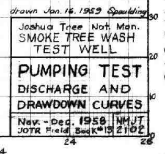
May 23, 1958	Well site selected in Smoke Tree Wash by Superintendent Fladmark, Chief Ranger Earenfight, Landscape Architect Knowles and Hydraulic Engineer Speulding.
June 4, 1958	Invitation for bids issued.
June 1958	Site inspected by geologist from Ground Water Branch, USGS. On his advice well site was moved.
June 16, 1958	Bids opened in Superintendent's Office.
June 16, 1958	Contract awarded to Clifford Suffdy, Joshua Tree.
June 30, 1958	Date of receipt of Notice to Proceed
July 16, 1958	Contractor moved onto site.
July 18, 1958	Contractor started drilling.
July 22, 1958	Bore down 42 feet.
July 24, 1958	Bore down 45 feet.
July 29, 1958	Bore down 148 feet Casing down 73 feet Contractor reported that he was going to pull casing up 15' and under-ream to push back boulders. Contractor to shut down for two weeks to drill another well.
September 15, 1958	Drilling resumed.
September 19, "	Bore down 200 feet.
September	Water reached at 215 feet.
September 27 "	Bore down 230 feet.
October 8 "	300 foot contract depth reached. Casing stuck at 231' dept. Static water stands at 171.5' depth.
October 17 "	Extra Work Order No. 1 issued to drill an additional 100 feet to 400 foot depth and to substitute 10-inch casing for 12-inch below 231' depth.

October 21, 1958	Contractor attempted to resume drilling open bore but found well below casing was filled with sand.
November 6, 1958	Drilling and casing completed to 400 foot depth.
November 11, 1958	Swabbing and bailing started.
November 14, 1958	Swabbing and bailing completed. Contractor reported 24 to 28 hours of swabbing and bailing during which time he bailed 16 to 20 GPM "without pulling level down."
November 20, 1958	Pump installed.
November 21, 1958	Pumped well and surged 14 1/2 hours.
December 1, 1958	Started test pumping.
December 4, 1958	Completed test pumping.
December 9, 1958	Cleanup completed and well accepted.

JOSHUA TREE NATIONAL MONUMENT
WELL LOCATION
COTTONWOOD AREA
Scale 1:62,500 (1" = 1 mile) 11/12/58
L. Spaulding NMJT 2101







drawn Jan. 16, 1959 *Spaulding* 30
Joshua Tree Nat. Mon.
SMOKE TREE WASH
TEST WELL 20
PUMPING TEST
DISCHARGE AND
DRAWDOWN CURVES 10
Nov. - Dec. 1956 NM/JT
JOTR Field Book 152102 20
24 26

180 New Montgomery
San Francisco 5, California

Ketcham

154

August 29, 1962

Siler
Rev.Draft
Fowler

Memorandum

To: Superintendent, Joshua Tree
From: Regional Chief of Lands - Western Region
Subject: U.S.G.S. Stream Gauging Station - Joshua Tree

We have no objection to your issuing a Special Use Permit to the Geological Survey for the installation of a stream gauging station in the wash of 49 Palms Canyon. The Geological Survey has always cooperated with us fully in the solution of our water problems.

The installation should be out of sight of any normal visitor use area. At the time the actual site location is made it would be wise to have it approved by your office to ensure that it would not be an eyesore to the public in the surrounding terrain.

(SGM) JAMES M. SILER

Regional Chief of Lands

Copy to: Director
Chief, WODJ (2)

RWKetcham:lsr

Joshua Tree National Monument
Twentynine Palms, California

A 9031

August 23, 1962

Memorandum

To: Regional Director, Western Region
From: Superintendent, Joshua Tree
Subject: U.S.G.S. Stream Gauging Station - Joshua Tree

Messrs. Littlefield and Scott, Engineers with Water Resources Division U. S. G. S., have discussed their need for additional stream gauging stations. One of highest priority is 49 Palms Canyon. They inform me they have received appropriations for their proposed station and will soon be making application for a permit.

Their proposed station would be a permanent installation in the mouth of 49 Palms Canyon approximately 1/8 mile inside the monument boundary. This is immediately south of the Smoketree section of this community. Their installation would consist of a concrete block building approximately 5' X 5' to house instruments and a weir in the wash bed.

We see no objection to issuing a special use permit but would appreciate your thoughts on this before final discussion with U.S.G.S.

SGD/WM. R. SUPERNAUGH
Wm. R. Supernaugh
Superintendent

PLANS SHEET FOR COMPLETION REPORT

14-00000

Park Joshua Tree National Monument	Region Western	Year Programmed 1961 - 62
Location in Park Cottonwood, Ryan, Oasis	State(s) California	PCP No. U-22, U-27, U-28, U-29, U-21a2
	County or Counties San Bernardino Riverside	Master Plan No. MS-ST 3011, 3012, 3019
 Contract and/or  Day Labor		Master Plan Corrected By Leroy S. Angden
Work Order Title Cottonwood, Ryan, and Oasis Utility Package		As Built Drawings By Dustin Aughenbaugh
		Date Started 3/21/62
		Date Completed 12/14/62 ✓
DESCRIPTION OF FIXED ASSETS (For completion by employee in charge of project)		TOTAL COSTS (For completion by FFO)
Water Systems: Account No. 100.8 Oasis Headquarters (4,733.76) Cottonwood Residence (7,643.88) Cottonwood Area (95,934.67) ~~(95,934.67)~~ Ryan Pickup Station (28,462.29) Sewer Systems: Account No. 100.8 Oasis Headquarters (3,525.30) Cottonwood Residence (9,297.74) Cottonwood Campground (288.00) Ryan Drainage (883.02) Gas Systems: Account No. 100.8 Cottonwood (3,412.48) ✓		178,850.12
JOURNAL VOUCHER NO. 34 <u>42</u> DATE <u>APR 13 1964</u>		\$ 178,850.12 ✓

DISTRIBUTION		THE FIXED ASSET DESCRIBED ABOVE HAS BEEN COMPLETED IN ACCORDANCE WITH APPROVED DRAWINGS, SPECIFICATIONS, AND AUTHORIZED CHANGES	
To		Submitted	
Ch. DEC		By: <u>Herman W. Schmitt</u>	Title: <u>Administrative Asst.</u> Date: <u>3/6/64</u>
WASO		Approved	
Region		By: <u>W. H. Spurgeon</u>	Title: <u>Superintendent</u> Date: <u>3/6/64</u>
WOSC			
YPO			
Joshua Tree		COSTS VERIFIED	Title: Date:
		BY <u>J. K. Kutz</u>	Accountant <u>APR 13 1964</u>

NARRATIVE STATEMENT FOR COMPLETION REPORT
ON THE CONSTRUCTION OF COTTONWOOD, RYAN,
AND OASIS UTILITY PACKAGE

Work was started on March 21, 1962 by the Successful low bidder, Meridith and Simpson Construction Co. of Indio, California.

The first phase of work consisted of diggin 21,041 feet of trench and installing asbestos, cement and steel pipe, from the previously completed Smoke Tree Wash well to the Cottonwood District Area and Campground.

A Pump House with an area of 167 sq.ft., deep well turbin pump, and diesel engine were installed at the well site. A 100,000 gallon steel reservoir was constructed atop a hill and campground. Valve boxes, gate valves, air vacuum relief valves, fire hydrants and hose houses were installed as specified to complete the Water System to the Campground Residential Area and Contact Station. A Sewer System consisting of a 6,000 gallon septic tank and seepage bed was constructed. Materials consisted of 1128 feet of cast iron and vitrified clay pipe, installed with three man holes and one clean-out. The Sewer System provided service for three residences presently under construction.

Change Order No. 1 issued May 4, 1962, provided for the addition of a clutch to the Cottonwood Pump Engine.

Change Order No. 3 issued June 1, 1962 added two 3/4" copper service outlets with curb stops, copper risers, and globe valves. One was near the Cottonwood Water Tank Sute, the other at the Cottonwood Pump House.

Change Order No. 4, issued June 6, 1962, directed installation of two 40 ft. sections of 4" cast iron soil pipe. Pipe was plugged and installed; one under each of the Cottonwood Campground Loops at locations specified.

Change Order No. 6, issued August 29, 1962, provided for installation of 54 ft. of 2" pipe and necessary valves and fittings. This line provided water for the Picnic Area at Cottonwood Campground.

Change Order No. 10, issued May 15, 1963, provided for raising the fire hydrants at the Cottonwood Contact Station and overruns on bid quantities.

The Water and Sewer Systems at the Oasis Headquarters were expended to provide utility service for proposed residences; 597 feet of asbestos, cement pipe along with valves, fire hydrants, water meters, and 126 feet of copper tubing brought water service to each proposed building site. 922 feet of cast iron and vitrified clay pipe were installed to provide service from the residential area to the present System.

Change Order No. 6 issued August 29, 1962, directed the installation of 4 inch cast iron cement lined pipe on water lines crossing all sewer lines.

Change Order No. 10, dated May 15, 1963, provided installation of sewer cleanout complete with fittings, concrete blocks, and cover for Oasis Sewer System extension.

Water was provided for camper use in the monument by rehabilitation of an old dug well and construction of a water system in Lost Horse Valley. The old well was cleaned and lined with a corrugated iron pipe encased in concrete. A small gasoline engine-driven jet pump is used to pump the water to a 30,000 gallon steel reservoir. 3,352 feet of 2-1/2" steel pipe, coated and wrapped, connects the reservoir with the water station. Four water stations, each with three self-closing valves and one drinking bubbler, are provided around the parking lot. The station is provided with 251 feet of galvanized drainage pipe leading to a 12' X 50' seepage bed across the main road.

Change Order No. 3 dated June 6, 1962, was for the addition of one 3/4" service outlet, copper riser, and globe valve at the Ryan Pump House.

Change Order No. 7 issued August 22, 1962, directed the installation of a pressure regulating valve between the pump and the distribution line and added one non-freeze faucet at each of the water stations. These units were installed by Park Personnel.

An LP Gas System was installed at Cottenwood. Gas is stored in a 1000-gallon tank surrounded with a 6 ft. high chain link fence. 538 feet of steel distribution line takes the gas from tank to each of the three residences and to the Utility Building.

L-54

December 14, 1959

Memorandum

To: Superintendent, Joshua Tree
From: Acting Regional Chief of Operations, Region Four
Subject: Completion Report, Snake Tree Wash Well
Joshua Tree National Monument

Attached is an advance copy of a completion report of construction of a test water well in Snake Tree Wash in Joshua Tree National Monument.

The incomplete report is being distributed at this time for information only to aid planning of a water system using the well.

Acting Regional Chief of Operations

Attachment

Copy to: Director (2) (w/cy of report)
Chief, WDC (2) (w/cy of report)

WESTERN OFFICE
DESIGN & CONSTRUCTION
DEC 16 1959 A.M.

CHIEF	
ADMIN. ASSIST.	
PERSONNEL	
PLANS & PROG.	
SAFETY	
ARCHITECT	
ENGINEER	
LAND. ARCH.	
ACTION TAKEN - DATE	

None - File

9 BPL

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
COMPLETION REPORT OF CONSTRUCTION PROJECT

Advance Copy
10/16/59

REGION Pace	AREA Joshua Tree National Monument	COUNTY Riverside	STATE California
PROJECT OR JOB TITLE Test Water Well			PCP NO. -
LOCATION IN AREA Cottonwood Area		MASTER PLAN NO. -	BUILDING NO. -
WORKING DRAWING NO. AND TITLE NMT 2101 Well Location (8" x 10 1/2")			
APPROPRIATION TITLE AND SYMBOL 1481033 (143.2) Investigation of Water Resources and 14X1035			ACCOUNT NO. (134.1) Work Order 13-WO-59
CONTRACT NO. 14-10-434-247		DATE WORK STARTED July 18, 1958	DATE WORK COMPLETED December 9, 1958
NAME OF CONTRACTOR Clifford Suffy		ADDRESS Joshua Tree, California	

COST ANALYSIS

CONSTRUCTION ITEMS	QTY.	UNIT COST IN PLACE	TOTAL COST IN PLACE
Item 1. Drilling, 0 to 200 ft.	200 ft.	\$10.00	\$ 2,000.00
Item 2. Drilling, 200 to 300 ft.	100 ft.	9.00	900.00
Item 3. 12-inch casing	232 ft.	4.50	1,044.00
Item 4. Bailing Test	8 hrs.	12.50	100.00
Item 5. Developing Well	10 hrs.	10.00	100.00
Item 6. Furnish and Set Test Pump	1 ea.	300.00	300.00
Item 7. Pumping Test	36 hrs.	6.00	216.00
Item 8. Drilling, below 300 ft.	100 ft.	9.00	900.00
Item 9. 10-inch casing, 231 to 300 ft.	69 ft.	3.50	241.50
Item 10. 10-inch casing below 300 ft.	100 ft.	4.50	450.00
Total Contract			6,251.50
Other Expense - Reproduction & Telephone			8.40
NOTE: The original contract amount (\$4,990.00) was financed under Appropriation 1481033, Account 143.2. The cost of Extra Work Order No. 1 was financed under Appropriation 14X1035, Work Order No. 13-WO-59.			
COST NOT VERIFIED			
TOTAL			\$ 6,259.90

SUMMARY OF EXPENDITURES

PERSONAL SERVICES -	EQUIPMENT -	MATERIALS AND SUPPLIES -
OTHER \$8.40		

CHANGE ORDERS

ORIGINAL CONTRACT AMOUNT \$4,990.00	FIRST \$1,251.50	SECOND	THIRD
FINAL CONTRACT AMOUNT \$6,251.50	FOURTH	FIFTH	SIXTH

THIS PROJECT OR JOB HAS BEEN COMPLETED IN ACCORDANCE WITH
APPROVED DRAWINGS, SPECIFICATIONS, AUTHORIZED CHANGES

SUBMITTED BY (Name and Title) Wm H. Spaulding, Hydraulic Engineer, Region Four	DATE March 17, 1959
APPROVED BY (Name and Title) William R. Supermarch, Superintendent, Region Four	

October 13, 1959

Memorandum (AIR MAIL)

To: Director

From: Assistant Regional Director

Subject: Capitalization Procedures, Water Rights Acquisition Projects

We are attaching a copy of a draft completion report covering a test well at Joshua Tree National Monument. We have been unable to find instructions covering the procedure for closing this type of work order and entering the cost in the fixed asset accounts.

The best information, available in this office, indicates that the following costs were incurred on this project:

<u>Office of Record</u>	<u>Appropriation</u>	<u>Account or W. O.</u>	<u>Amount</u>
Region Four Field Finance Office	1461033	143.2	\$ 5,330.78
WASO	14X1035	13-WR-59	1,269.90
WASO	14X1035	4-WR-59	910.41
WASO (USGS)	148/90804	550 (Est)	200.00
		Total	\$ 7,711.09

We would appreciate being advised on the following questions:

- (1) Are the costs incurred under other than appropriation 14X1035 to be capitalized?
- (2) What office completes the fiscal certification?
- (3) What is the procedure for accumulating the total cost in one office?
- (4) Should this be carried in our general ledger and fixed asset records?

(SGS) HERBERT MAIER

Herbert Maier
Assistant Regional
Director

Attachments:

154 Jote
+ R4 10/13
Johnson
Spaulding
Persons
Wesky
Maier

Note: one copy of completion report sent to Washington with this memo.
Original and 3 copies retained by Spaulding pending instructions.

"FILE COPY"

UNITED STATES
NATIONAL PARK SERVICE
WESTERN OFFICE, DIVISION DESIGN & CONSTRUCTION
1000 GEARY STREET
San Francisco 9, California

August 25, 1959

1. Case 9/26
return to 3. Spaulding
LSS 9/25
2. Whiting
L-4
See memo of 9/25
to Chert, WOOD
& memo of 9/28
to Supt. JT

MEMORANDUM

TO: Regional Director, Region Four

FROM: Supervisor Mails and Files, W.O.D.C.

SUBJECT: Contract 14-10-434-247; Joshua Tree N. M.
Drilling Test Water Well

We find that we are missing the following contract documents in our files. Will you please furnish us with copy of same to bring our files up-to-date and oblige:

Completion Report

Report was sent to Wash for
fiscal ~~reficate~~ verification - to be
sent by Wash to JOTR - NOT HEARD
FROM SINCE -
L. Spaulding
8/26

B. E. Gray
Supv. Mails & Files
W. O. D. C.



June 29, 1959

L54
85
1-509
LSS
Spaulding
Whitworth
Wosky

Memorandum

To: Director
From: Acting Assistant Regional Director
Subject: Water Analysis - Snake Tree Wash Well
Joshua Tree National Monument

FILE COPY

Attached for Mr. Rumm's use in connection with geologic study of the Snake Tree Wash Test Well are a copy of an analysis of a water sample from the well and a copy of USGS Geologist Baker's letter of March 2 to Superintendent Spornough transmitting the analysis.

The water which is proposed for use at the Cottonwood Area is reported to be of good chemical quality except that the concentration of fluoride is in excess of the recommended maximum.

(SGD) JOHN B. WOSKY

John B. Wosky
Acting Assistant Regional Director

Attachments

Copy to: Superintendent, Joshua Tree
Chief, WERC (w/attachments)
Mr. Richey
U. S. Public Health Service (w/attachments)

LSSpaulding:hat

January 30, 1959

See 14-10-434-247

Memorandum

To: Superintendent, Joshua Tree
From: Regional Chief of Operations, Region Four
Subject: Smoke Tree Wash Test Well, Cottonwood Area,
Docket 2, Joshua Tree National Monument

154	
WESTERN OFFICE DESIGN & CONSTRUCTION	
FEB 2 1959 A.M.	
CHIEF	
ADMIN. ASSIST.	
PERSONNEL	
PLANS & PROG.	
SAFETY	
ARCHITECT	
ENGINEER	3
LAND ARCH.	1
RECORDS	2
ACTION TAKEN - DATE	
None	

Attached for filing in Docket 2 are copies of the following papers relating to the Smoke Tree Wash Test Well:

1. Change Order No. 1, dated October 16, 1958.
2. Letter of October 22, 1958, from Superintendent Supernough to Mr. Clifford Saffdy, specifying the size and spacing of perforations and permitting the perforation of casing.
3. Pump Data, a report by Clifford Saffdy on test pumping.
4. Water Well Driller's Report for State of California dated December 8, 1958, by Clifford Saffdy.
5. Final Estimate of quantities and payment, a letter dated December 9, 1958 approved by Superintendent Supernough.
6. History of development of the well by chronological dates, dated January 16, 1959.
7. Drawing HMT 2101, Well Location, Cottonwood Area.
8. Drawing HMT 2102, Pumping Test, Discharge and Drawdown Curves, dated January 16, 1959.
9. Drawing HMT 2103, Pumping Test, Capacity Curves, dated January 30, 1959.

Items 1 to 8 are copies of the attachments to Mr. Manbey's memorandum of January 16 to the Ground Water Branch, USGS. Item 9 was prepared later to determine the maximum and practical capacities of the well. A copy of this last is being sent to the USGS.

Attachments (9)

Copy to: Director (w/attachs)
✓ Chief, WDC "

Fred T. Johnston
Regional Chief of Operations

Docket File

1-24

Region Four
189 New Montgomery Street
San Francisco 3, California

January 16, 1959

~~Spaulding~~ *SS*

~~Whitworth~~ *W*

~~Manbey~~ *BF*

✓ Helen Trotter

FILE COPY

Memorandum

To: U. S. Geological Survey
Ground Water Branch
221 Redondo Avenue
Long Beach 3, California

Attention: Mr. J. S. Bader

From: Acting Regional Chief of Operations, Region Four

Subject: Smoke Tree Wash Test Well, Cottonwood Area,
Joshua Tree National Monument *Docket 2*

Attached are copies of the following papers relating to the Smoke Tree Wash Test Well which Superintendent Supernough asked that we send you.

1. Change Order No. 1, dated October 16, 1958;
2. Letter of October 22, 1958, from Superintendent Supernough to Mr. Clifford Saffdy specifying the size and spacing of perforations and permitting the preperforating of casing;
3. Drawing SMT 2101, well location, Cottonwood Area;
4. Pump Rate, a report by Clifford Saffdy on test pumping;
5. Water Well Driller's Report for State of California, dated December 8, 1958, by Clifford Saffdy;
6. Final Estimate of quantities and payment under contract No. 14-10-434-247;
7. Drawing SMT 2102, Pumping Test, Discharge and Drawdown Curves, prepared by Linn Spaulding January 16, 1959;
8. A history of development of the well by chronological dates prepared January 16, 1959 by Linn Spaulding.

Detailed notes are recorded in Joshua Tree Field Books 8 and 13, which are now at this office but will soon be sent to Joshua Tree National Monument. Book 8 records the location survey and sieve analysis of soil samples from 0 to 300 foot depth. Book 13 covers the pumping tests and includes copies of the driller's rough notes and details of casing and pumping equipment.

The pumping test is difficult to interpret because of the erratic pumping rate and the failure of the electric sounder to function properly. However, we were able to make a determination of the specific and maximum capacities by plotting a series of points for times when the pumping rate held steady and drawdown was available. We calculate the specific capacity to be 0.50 GPM per foot of drawdown and the maximum capacity from 45 to 48 GPM.

Bernard F. Manbey
Acting Regional Chief
of Operations

Attachments
Copy to: Director*
Copy to: Supt., Joshua Tree*

Linn Spaulding:hat

* NOTE FOR JOSHUA TREE: Attachments will be transmitted at a later date for inclusion in Water Right Docket 2.

Form 10-556
(June 1956)UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

WORK ORDER

Area or Office Washington Office		Region 134.1	No. 13-WR-59
The Region Four Office (Organizational Unit) Regional Director is authorized and requested to proceed with the performance of the work or service described below in accordance with the detail and plan more specifically set forth in the drawing or plan referred to herein.		Date October 15, 1958	
Title and/or Description of Project or Service to be Performed Deepen test well		General Ledger Acct. No. 134.1	
Location of Work Requested Cottonwood Area - Joshua Tree		Fund Symbol 10X1635 (0943)	
		Statutory Authority (where necessary)	
		Plan No.	
		PCP No.	
		Year Programmed	
		Est. Starting Date	
		Est. Completion Date	

ESTIMATE OF COSTS			
Components of Costs	Amount	Project Features	Amount
Contract	\$1,400	Deepen test well	\$1,400
TOTAL	\$1,400	TOTAL	\$1,400

Distribution of Copies	Remark: This well drilled to 300 foot depth with 1958 NPS funds. Intercepted water suggests that greater depth may produce suitable water well. Approved by (Signature, Title, & Date) <i>P. J. Dean</i> Chief, Water Res. Sec. 10/15/58 Regional Office Clearance when Required (Signature, Title, & Date)	ALLOTMENT ACTION	
No. TO		Allotment Advice No.	
Accounts		Allotment Advice Date	
Budget		Amount for Work Order	
Reg. Four (2)			
Sup.			
Dist.			
Plan			

If Additional Space is Necessary, Use Reverse in Tumble Fashion

101621

JOSHUA TREE

Cottonwood Area Well (Smoke Tree Wash)

Contract 14-10-434-247 of June 16, 1958

\$4,990

To: Clifford H. Suffdy
P. O. Box 116
Joshua Tree, California

Payment 1958 - M&P Funds 0140 (143.2)

200' @ \$10.00	\$2,000
100' @ \$ 9.00	900
300' 12" casing @ \$4.50	1,350
Bailing pump test @ \$12.50	
per hour	100
Develop Well @ \$10.00 hr.	100
Set Test pump	300
40/hr. pump test @ \$6.00/hr	240
	<u>\$4,990</u>

154-1

March 17, 1958

Memorandum

To: Regional Director, Region Four

From: Chief, Water Resources Section

Subject: Proposed Well, Cottonwood Canyon, Joshua Tree

This is a specific answer to the first and last paragraph of the memorandum of March 7 from Mr. Whitworth concerning "Water Resources Investigations", but it is tied into the general subject of programs and budgets.

To determine what 1958 funds should still be allotted for investigations and spent or obligated by June 30 the most urgent problem is to determine the cost of the test well which Mr. Kunkel has recommended along the synclinal axis behind Texas Springs at Death Valley. Bids should be obtained just as quickly as possible, in accordance with the memorandum of March 14, with partial copy of the Kunkel report, from Mr. Price. The award of the contract, however, must only be made in time to obligate the funds by June 30.

My memorandum of February 17 stated that there would not be as much as \$4,000 for a test well at Cottonwood Canyon in this fiscal year, so far as I could see. However, there may be close to that amount available if the Death Valley bid is close enough to \$10,000, but only for a test well or other investigation.

If Mr. Kunkel is reasonably certain that water will be obtained by drilling in Cottonwood Canyon, and you propose to do so to obtain water as even an interim supply for the Ranger Station, the drilling should be financed from water supply construction funds. The work is certainly not eligible for financing from Account 347, which is for acquisition of water rights.

SIGNED

A. van V. Dunn
Chief, Water Resources Section

Copy to: Superintendent, Joshua Tree
Chief, WDC

WESTERN OFF
DESIGN & CONSTR

MAR 19 1958

CHIEF	
ADMIN. ASSIST.	
PERSONNEL	
PLANNING & RESEARCH	
SAFETY	
ARCHITECT	
ENGINEER	
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RECORDS & COMM.	
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WATER POLLUTION	

154-1

February 17, 1958

Memorandum

To: Regional Director, Region Four

From: Chief, Water Resources Section

Subject: Water Resources Investigation, Cottonwood Area, Joshua Tree

As stated in the memorandum of January 31 to the Superintendent from Mr. Whitworth, we do not appear to have 1958 funds to cover an investigation costing \$4,000. With the limited 1959 budget, since the Secretary rejected our over-ceiling budget, we will have the same total of \$60,330 in 1959 that we have had in 1958.

As soon as practical, each region is supposed to prepare their revised 1959 budgets and programs, and preliminary programs and budgets for 1960. This was covered in the Lands Branch conference of last November. Each project, for each year, should have your priority number, so that we may cut the 1959 program to fit the final appropriation, and add the lower priorities at the top of the 1960 estimates. These programs should also include justification by which we can decide whether to include borderline projects in one region and reject those in another.

However, you also suggest a possible purchase of an area including a spring or well. We could finance pump tests and costs of spring flow measurements as part of the appraisal, and pay those costs from the acquisition account. Although I anticipate that this fund, under Account 347, may be fully used by the end of 1959, particularly since Engineers' salaries were boosted to the top of the grades, we have a large unallotted reserve in the account, of which part is definitely to be carried over to 1959. For that reason, if part of the water problem at Joshua Tree could be solved by purchase of land and water rights, we shall be pleased to consider any proposal which you submit.

Returning to the Investigation funds, Account 0140 (143.2), we are now holding between \$12,000 and \$13,000 for 1958 work at Death Valley, and some smaller amounts for studies in other areas in other Regions. Of the \$750 for studies at Joshua Tree, to which Mr. Whitworth referred, \$500 has been obligated for 2 Pinto Well observations by Mr. Kunkel, as a result of our conference on January 20.

WESTERN O
DESIGN & CONS

FEB 21 1958

CHIEF
ADMIN. ASSN.
PERSONNEL
PLANS & PRG.
SAFETY
ARCHITECT
LAND ARCH.
ACTION TAKEN

Nov

During our January 20 conference, Mr. Kunkel recommended a test well ~~again~~ back of the Furnace Creek Inn, in lieu of any more trenching in Furnace Creek Wash. We have deferred suggestions while awaiting the Kunkel report which is past due, but we hope to have it nearly any day.

We know that the one bid of last year suggested a probable cost of \$10,985--last column of analysis with my memorandum of March 20, 1957. However, Mr. Kunkel advised that he had supplied you with specifications for that well, which were not used in the WDC invitation for that bid. Mr. Kunkel stated that the WDC specifications would not produce all the information which he wanted, and that they also included conditions which probably scared off potential bidders, and led to high prices in the one bid.

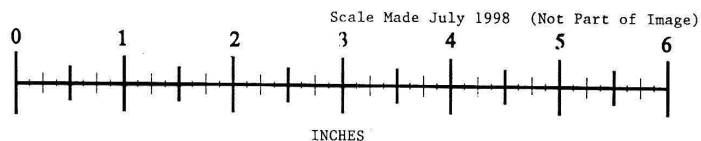
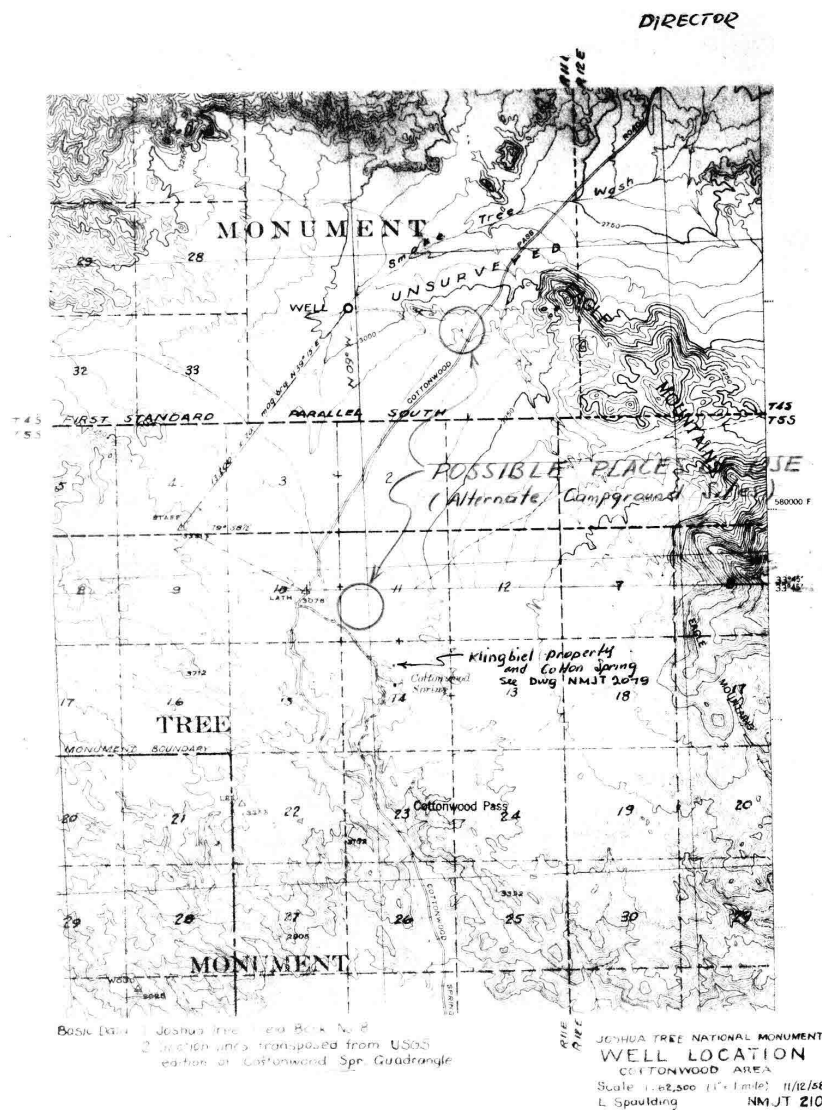
We should like to reallocate some earmarked funds by early March, if we receive the Kunkel report by then. We have in mind that the test well at Death Valley can probably be drilled for \$9,000 or \$10,000 if the Kunkel specifications are used, and that the rest of the funds we are now holding, plus some for other areas, may be ample to finish one going study at Hatteras, and even provide some additional funds for Joshua Tree if a small investigation there had sufficiently high priority in your Region.

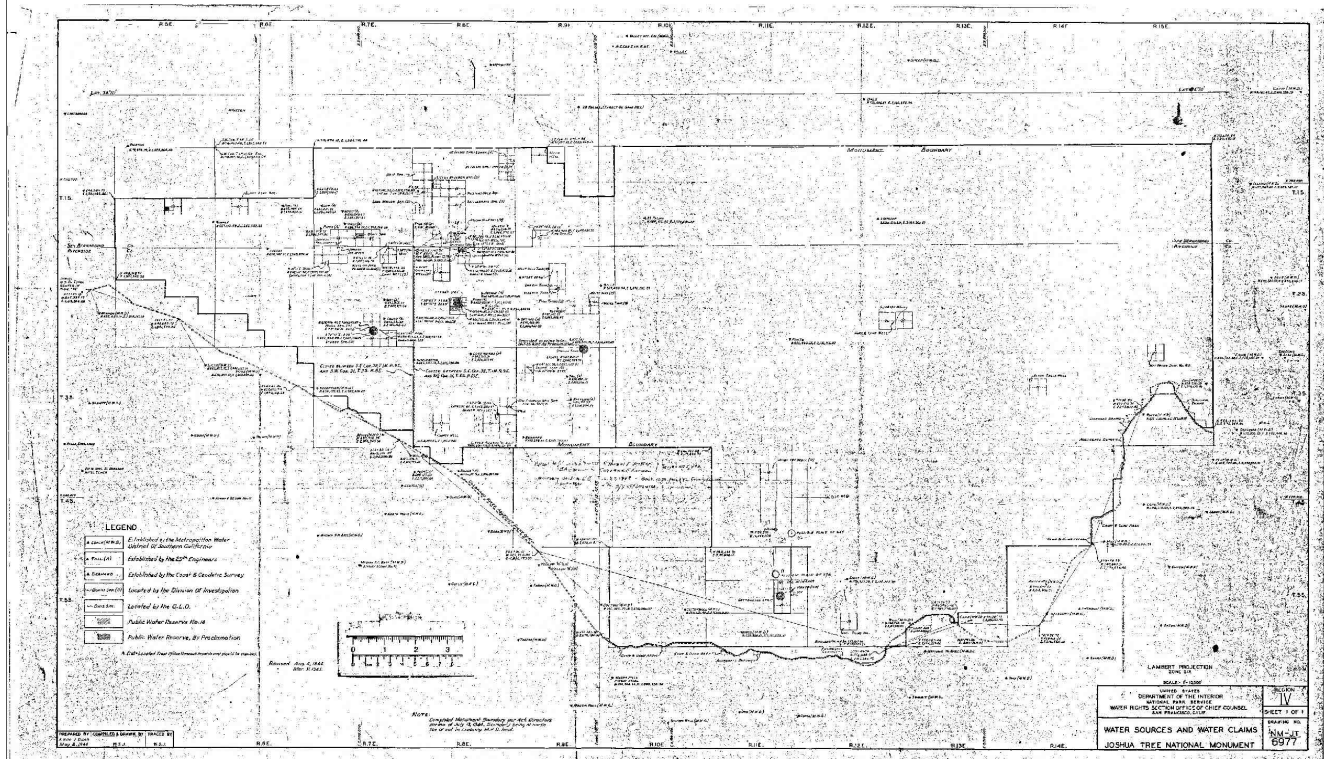
For that reason it is requested that Mr. Whitworth or Mr. Spaulding compare the specifications prepared by Mr. Kunkel and WDC, and give some consideration to the preparation of proper specifications and invitation for bids as soon as possible. We should like to know wherein the two sets of specifications differed. You might even wish to take the matter up with Mr. Kunkel while we await his report.

SIGNED

A. van V. Dunn
Chief, Water Resources Section

Copy to: Superintendent, Joshua Tree
Superintendent, Death Valley
Chief, WDC





Docket Information

Number of Documents in Docket 47

Documents Dated from 5/2/1944 to 8/16/1973

Docket Compiled: 4/19/2011