



WATER-RIGHT DOCKET

Montezuma Castle National Monument

Docket No: 2

(WELL AREA) MONTEZUMA CASTLE BACKUP - WELL

Preliminary Docket Information

03-25-1975: water right/source docket information

WATER RESOURCES/WATER RIC DATE: March 25, 1975

WATER RIGHT/SOURCE DOCKET INFORMATION

REGION Western AREA Montezuma Castle

SITE Well in the Well Area of Montezuma Castle N.M.

STATE Arizona COUNTY Yavapai DOCKET NO WR #2

LOCATION NW¹/₄ Section 31, T15N, R6E

REGIONAL BASIN _____ LOCAL BASIN _____

ACQUIRED BY _____

APPLICATION _____ PERMIT _____ CERTIFICATE _____

ACTION DUE _____ PRIORITY _____ RESERVATION _____

QUANTITY 25 gpm pump installed USE domestic

STATUS _____ SOURCE _____

REMARKS _____

NARRATIVE:

This docket contains materials on a drilled well in the "WELL" area of Montezuma Castle National Monument. In order to provide a domestic water supply in this area (supplementing the supply from Montezuma Well, itself, and/or Beaver Creek), the well was drilled in June of 1947 to a depth of 105 feet. A 25 gpm pump was installed. From a Record of Well filed on 2/4/48 it appears that the seepage from the ditch (Wales Arnold) and Beaver Creek cut a stratum of 25 feet while the depth at which water was found was 79 feet.

Compiled by M. Ackerman

Approved by W. Werrell

Page 1 of 1

W A T E R D O C K E T I N F O R M A T I O N

A R E A MONTEZUMA CASTLE N.M.

DOCKET NO. 2

APPLICATION NO.

PERMIT NO.

CERTIFICATE NO.

TITLE OF DOCKET WELL B- MONTEZUMA WELL AREA

PRIORITY 5/26/1947

REMARKS:

Montezuma Castle National Monument

Water Right Deed 7

Well B - Montezuma Well Area

1. Map No. NM-MC-5308, showing pump location.
2. Notice of Intention to Drill Well.
3. Report of Well Driller and Log of Well.
4. Record of Well.

Memo 7/24/89 from
Reg. 3

Montezuma Castle National Monument - Docket No. 2

1. Drawing NM-MC-5308.
2. Notice of Intention to Drill Well.
3. Report of Well Driller of June 21, 1947.
4. Record of Well and Log of Well.
5. Completion Report of Construction Project.

Montezuma Castle National Monument
Water Right #2
Outline of Assembly - Correspondence

1. Memorandum to Regional Director from Acting Chief Water Resources,
December 17, 1951
2. Memorandum to General Superintendent from Superintendent, February 4, 1952
3. Memorandum to General Superintendent from Regional Chief Cooperative
Activities, March 29, 1955
4. Memorandum to Regional Director from Chief Water Resources, August 9, 1957'
5. Memorandum to Chief Design and Construction from Regional Director,
December 21, 1960
6. Memorandum to Director from Assistant Regional Director, June 6, 1961
7. Memorandum to Director from Regional Director, April 6, 1962
8. Memorandum to Superintendent from Assistant Regional Director, Operations,
August 20, 1964
9. Memorandum to Superintendent from Assistant Regional Director, Operations,
July 20, 1965
10. Memorandum to Superintendent from Hydraulic Engineer, November 8, 1966

**STATEMENT OF CLAIMANT FORM
FOR
OTHER USES¹**

File No. 39- _____
Date Filed: _____
WFN _____

**VERDE RIVER WATERSHED
SUPERIOR COURT OF MARICOPA COUNTY**

- (Montezuma Castle NH)
1. Claimant Name: United States of America, c/o National Park Service
 Claimant Address: Western Regional Office, P.O. Box 36063 City San Francisco
 State: California Zip Code 94102 Telephone (415) 556-8660
 2. Basis of Claim:
 - A. ☐ Appropriation Right acquired prior to June 12, 1919. 1974 Water Rights Registration Act Registry No. _____
 - B. ☐ Appropriation Right acquired after June 12, 1919. Application No. _____, Permit No. _____, or Certificate of Water Right No. _____
 - C. ☐ Decreed water right. Principal litigants, court, date and case no.: _____
 - D. ☒ Right to withdraw groundwater. Reg. #55-629123 File #A (15-6) 31cba1
 - E. ☐ Other, describe: _____
 3. Claimed Priority Date: June 12, 1947 (month/day/year)
 4. Use:

A. ☒ Municipal B. ☐ Commercial or Industrial C. ☐ Mining D. ☐ Stockwatering other than from a stockpond	E. ☐ Recreation, Fish & Wildlife F. ☒ Other, describe: <u>This is a back-up for</u> <u>A (15-6) 31cba2.</u>
---	---
 5. Source of Water:
 - A. ☐ Stream: name _____, tributary to _____
 - B. ☐ Spring: name _____, tributary to _____
 - C. ☐ Lake or Reservoir: name _____, tributary to _____
 - D. ☒ Groundwater
 6. Legal description of the Point of Diversion: (attach additional sheet if required)
NE ¼, NW ¼, SW ¼, Section 31, Township 15 N/S, Range 6 E/W
 7. If there are Irrigation, Domestic or Stockpond uses also supplied from the Point of Diversion, describe:

 8. Means of Diversion:
 - A. ☐ Instream pump
 - B. ☐ Gravity flow into ditch, canal or pipeline.
 - C. ☒ Well: Arizona State Land Department, Arizona Water Commission or Arizona Department of Water Resources Intent to Drill File No. A (15-6) 31cba1
 - D. ☐ Other, describe _____

¹See Instructions for explanation of uses in this category

9. Means of Conveyance:

- A. ☒ Ditch, canal or pipeline. If the means of conveyance is owned and/or operated by some other entity, please give name and address: _____
- B. ☐ Other, describe: _____

10. Place of Use, if other than point of diversion: (attach additional sheet if required)

County N/A

Legal Subdivision	Section	Township	Range
_____	_____	_____ N/S	_____ E/W
_____	_____	_____ N/S	_____ E/W

11. Claimed Right:

- A. Maximum Flow Rate: N/A ☐ cubic-feet per second
☐ gallons per minute
☐ Arizona miner's inches
- B. Annual Volume of Water Use: _____ acre-feet
- C. Storage Right: _____ acre-feet

12. Attach photographs, maps or sketches necessary to show the point of diversion, storage reservoir(s), place(s) of use and means of conveyance.

13. It may be necessary for a representative from the Department of Water Resources to inspect the diversion, conveyance and place of use. Your signature following will grant permission to enter your property for the purpose of inspection: Signature of Claimant Bruce M. Kilgore, Chief Div. of Nat. Res. & Research14. Should it be necessary for a representative of the Department to contact you as the claimant or your representative, are there any special instructions regarding time of day or address to aid in locating the specified person? Western Regional Office, National Park Service
Regular work days, (415) 556-1036

15. Attach Filing Fee to Form. Mail form(s) and fee(s) to: Department of Water Resources, P.O. Box 2920, Phoenix, AZ 85062.

16. Additional comments: This well is a back-up supply for the well with Reg. #55-629125.
This well is presently not used.

(attach additional sheet if required)

17. Notarized Statement:

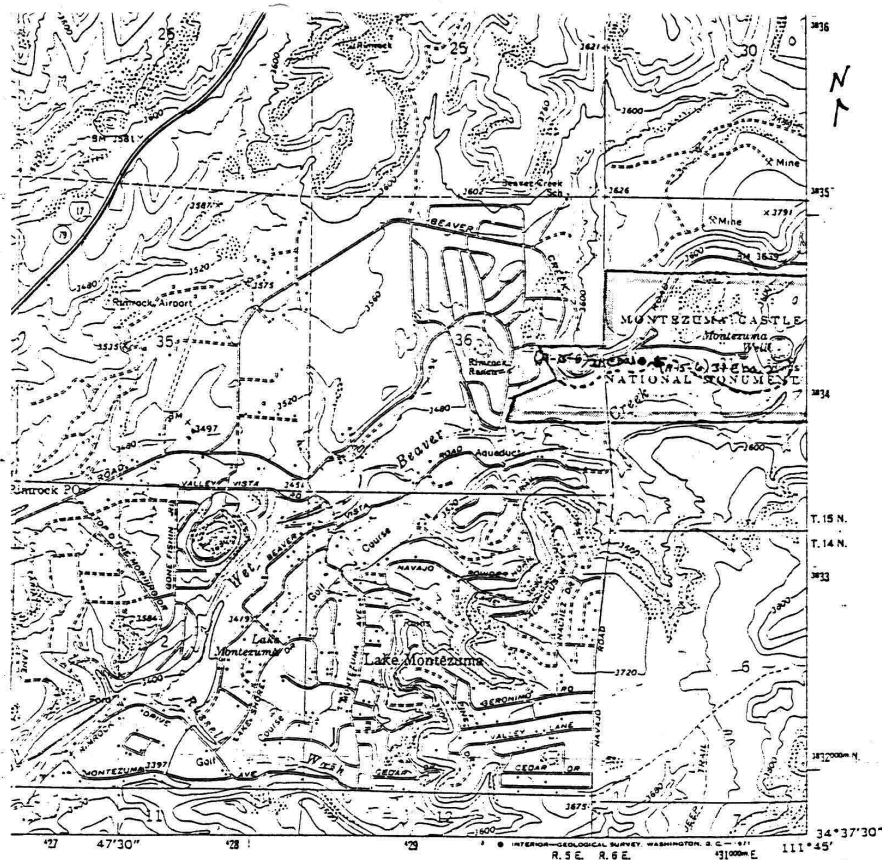
I WWEY, Bruce M. Kilgore, on behalf of the National Park Servicethe claimant(s) named in this claim, do hereby certify under penalty of perjury, that the information contained and statements made herein are to the best of my(~~our~~) knowledge and belief true, correct and complete.

(seal)

My Commission Expires:

Notary Public

or, _____
Authorized Personnel of the Department of Water Resources



1 MILE
1:27



ROAD CLASSIFICATION

Primary highway, all weather, hard surface	Light-duty road, all weather, improved surface
Secondary highway, all weather, hard surface	Unimproved road, fair or dry weather
Interstate Route	State Route

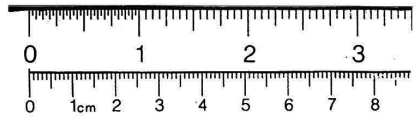
LAKE MONTEZUMA, ARIZ.
N 34°37'30" W 111°45'00"

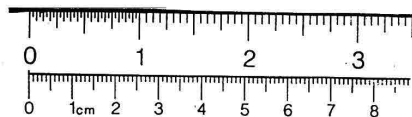
N. D. C. 20242
17

1969

AMS 1851 III NE-3EPIED 1498

---- Wales Arnold Ditch
within Monument





Montezuma Castle (Montezuma Well Area)
Well #(A-15-6) 31 cba1 and
Well #(A-15-6) 31 cba2



Montezuma Castle, Montezuma Well Area, looking East.
This photo was taken at road across irrigation ditch
from Well #(A-15-6) 31 cba1. The well house for
Well #(A-15-6) 31 cba2 (behind fenced-in area, left
of center) is located approximately 350 feet from
Well #(A-15-6) 31 cba1.

W. Reed
9/17/80

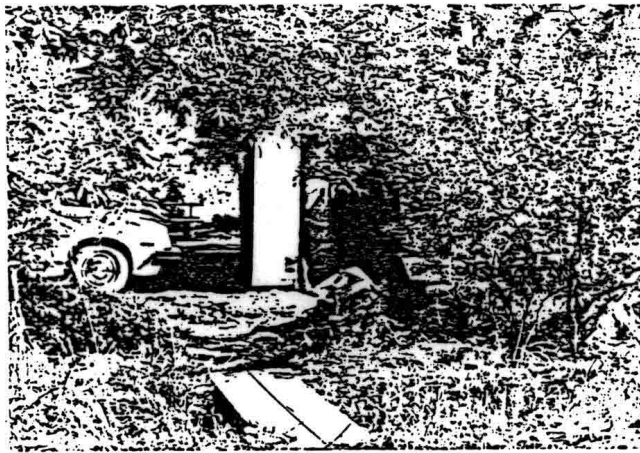
Montezuma Castle (Montezuma Well Area)
Well #(A-15-6) 31 cba1



Montezuma Castle, Montezuma Well Area,
looking Northeast. The irrigation ditch
that conveys water from the spring known
at Montezuma Well winds around Well #
(A-15-6) 31 cba1 and is between this well
and Well #(A-15-6) 31 cba2.

W. Reed
9/17/80

Montezuma Castle (Montezuma Well Area)
Well #(A-15-6) 31 cba1



Montezuma Castle, Montezuma Well Area, looking North. This well is located in a shed behind an NPS residence, shed is in front of GSA vehicle (center). The two boards (center foreground) are laid across the irrigation ditch that conveys water from the spring known as Montezuma Well.

W. Reed
9/17/80

STATEMENT OF CLAIMANT FORM
FOR
OTHER USES¹

File No. 39-_____
Date Filed: _____
WFN _____

VERDE RIVER WATERSHED
SUPERIOR COURT OF MARICOPA COUNTY

1. Claimant Name: United States of America, c/o National Park Service (Montezuma Castle Natl Monument)
 Claimant Address: Box 36063, 450 Golden Gate Avenue City San Francisco
 State: California Zip Code 94102 Telephone (415) 556-8660

2. Basis of Claim:
 - A. ☐ Appropriation Right acquired prior to June 12, 1919. 1974 Water Rights Registration Act Registry No. _____
 - B. ☐ Appropriation Right acquired after June 12, 1919. Application No. _____, Permit No. _____, or Certificate of Water Right No. _____
 - C. ☐ Decreed water right. Principal litigants, court, date and case no.: _____
 - D. ☒ Right to withdraw groundwater. Reg #55-629125 File #A (15-6) 31cba2
 - E. ☐ Other, describe: _____

3. Claimed Priority Date: June 12, 1947 (month/day/year)

4. Use:

A. ☒ Municipal B. ☐ Commercial or Industrial C. ☐ Mining D. ☐ Stockwatering other than from a stockpond	E. ☐ Recreation, Fish & Wildlife F. ☒ Other, describe: <u>Fire protection</u>
---	--

5. Source of Water:
 - A. ☐ Stream: name _____, tributary to _____
 - B. ☐ Spring: name _____, tributary to _____
 - C. ☐ Lake or Reservoir: name _____, tributary to _____
 - D. ☒ Groundwater

6. Legal description of the Point of Diversion: (attach additional sheet if required)
NE 1/4, NW 1/4, SW 1/4, Section 31, Township 15 N/S, Range 6 E/W

7. If there are Irrigation, Domestic or Stockpond uses also supplied from the Point of Diversion, describe:

8. Means of Diversion:
 - A. ☐ Instream pump
 - B. ☐ Gravity flow into ditch, canal or pipeline.
 - C. ☒ Well: Arizona State Land Department, Arizona Water Commission or Arizona Department of Water Resources Intent to Drill File No. A (15-6) 31cba2
 - D. ☐ Other, describe: _____

¹ See Instructions for explanation of uses in this category

9. Means of Conveyance:

- A. ☒ Ditch, canal or pipeline. If the means of conveyance is owned and/or operated by some other entity, please give name and address: _____
- B. ☐ Other, describe: _____

10. Place of Use, if other than point of diversion: (attach additional sheet if required)

County N/A

Legal Subdivision	Section	Township	Range
_____	_____	_____N/S	_____E/W
_____	_____	_____N/S	_____E/W

11. Claimed Right:

- A. Maximum Flow Rate: 35 ☐ cubic-feet per second
☒ gallons per minute
☐ Arizona miner's inches
- B. Annual Volume of Water Use: _____ acre-feet
- C. Storage Right: _____ acre-feet

12. Attach photographs, maps or sketches necessary to show the point of diversion, storage reservoir(s), place(s) of use and means of conveyance.

13. It may be necessary for a representative from the Department of Water Resources to inspect the diversion, conveyance and place of use. Your signature following will grant permission to enter your property for the purpose of inspection: Signature of Claimant Bruce M. Kilgore, Chief Div. of Nat. Res. & Research
Western Regional Office14. Should it be necessary for a representative of the Department to contact you as the claimant or your representative, are there any special instructions regarding time of day or address to aid in locating the specified person? Regular work days, (415) 556-1036

15. Attach Filing Fee to Form. Mail form(s) and fee(s) to: Department of Water Resources, P.O. Box 2920, Phoenix, AZ 85062.

16. Additional comments: The well with Reg #55-629123 is a back-up supply well for this well which presently supplies water for Montezuma Well unit of Montezuma Castle National Monument.

(attach additional sheet if required)

17. Notarized Statement:

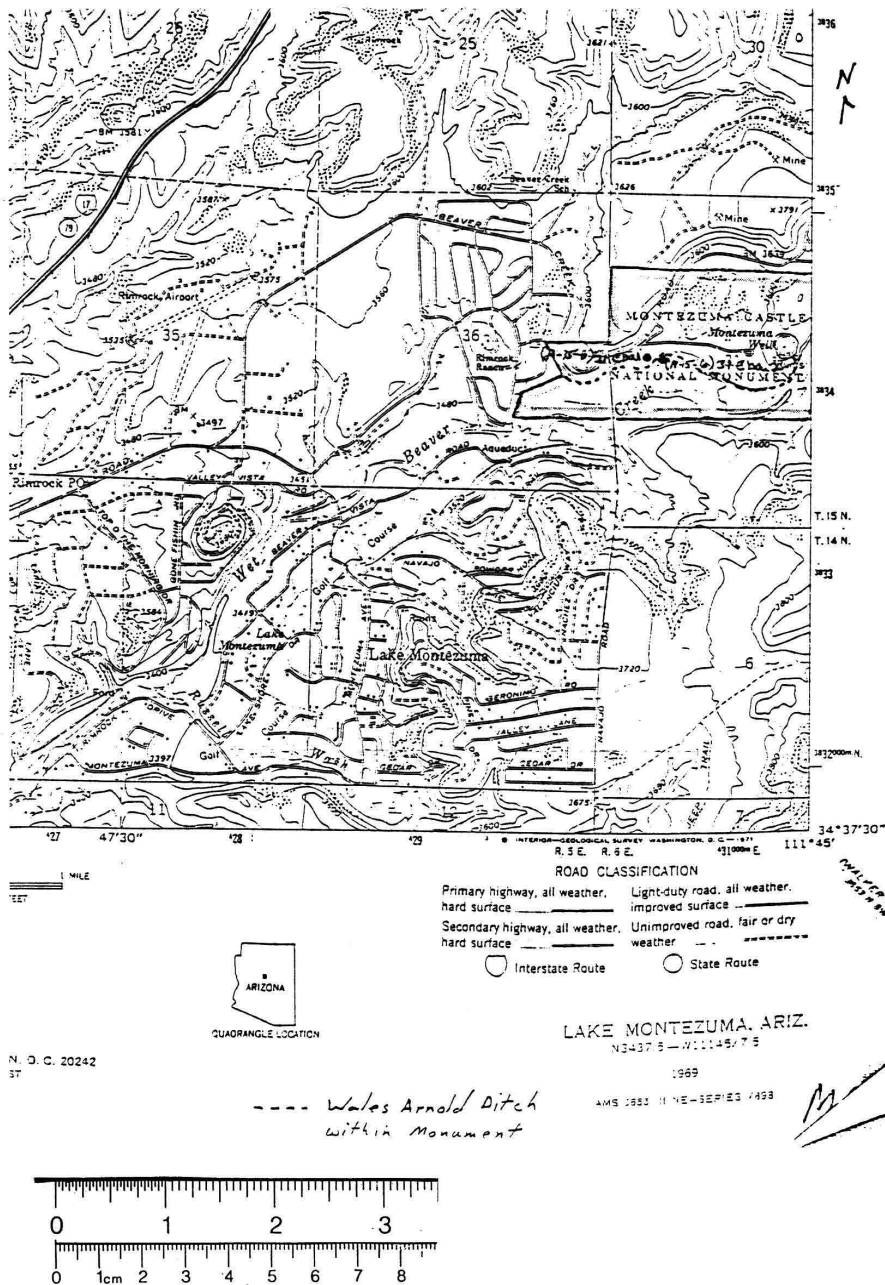
I (We), Bruce M. Kilgore, on behalf of the National Park Service
 the claimant(s) named in this claim, do hereby certify under penalty of perjury, that the information contained and statements made herein are to the best of my(our) knowledge and belief true, correct and complete.

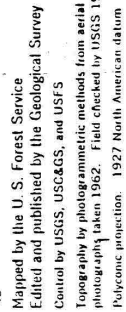
(seal)

My Commission Expires:

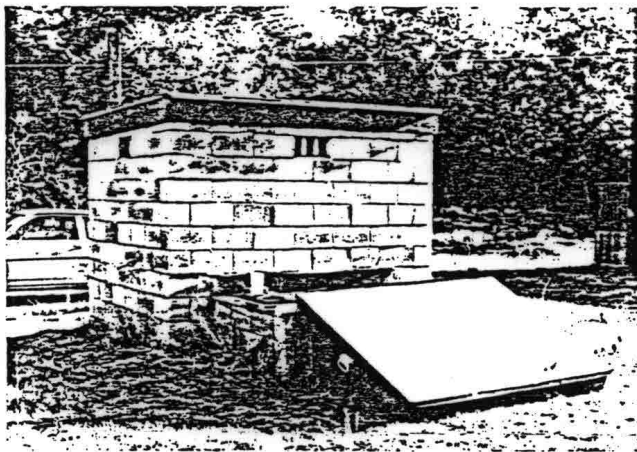
Notary Public

or, _____
 Authorized Personnel of the Department of Water Resources



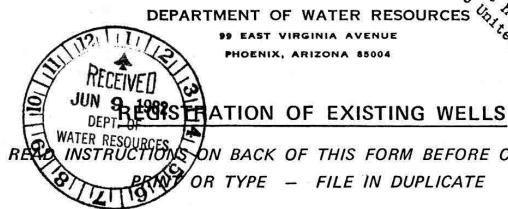


Montezuma Castle (Montezuma Well Area)
Well #(A-15-6) 31 cba2
Supply Well



Montezuma Castle, Supply Well - Montezuma Well Area, looking North. This well is located in extension at side of shed (center foreground). Irrigation ditch from Montezuma Well is in trees in background of photo. This well is near two NPS residences; corner of fenced-in backyard of one residence is at right of photo.

W. Reed
9/17/80



Declaration: The United States gives this certification to the State in the interest of equity, and does not concede that the State has power to regulate the rights of the United States to the use of water.

REGISTRATION FEE (CHECK ONE)	
EXEMPT WELL (NO CHARGE)	☒
NON-EXEMPT WELL - \$10.00	☐

FOR OFFICE USE ONLY	
REGISTRATION NO. 55-	629125
FILE NO.	A(15-6) 31 cba
FILED	6-9-82 AT 1:30
(DATE)	(TIME)
INA	
AMA	

- Name of Registrant:
National Park Service, Western Region, Division of Water Resources
450 Golden Gate Ave., Box 36063, San Francisco CA 94102
(Address) (City) (State) (Zip)
- File and/or Control Number under previous groundwater law:
13-702 (File Number) 35- (Control Number)
- The well is located within the NE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$, Section 31, of Township 15 N N/S, Range 6 E E/W, G & SRB & M, in the County of Yavapai.
 - If in a subdivision: Name of subdivision _____, Lot No. _____, Address _____.
- The principal use(s) of water (Examples: irrigation - stockwater - domestic - municipal - industrial)
public supply, domestic, fire protection
- If for irrigation use, number of acres irrigated from well _____.
- Owner of land on which well is located. If same as Item 1, check this box ☒

(Address) (City) (State) (Zip)
- Well data (If data not available, write N/A)
 - Depth of Well 140 feet
 - Diameter of casing 6 inches
 - Depth of casing N/A feet
 - Type of casing steel
 - Maximum pump capacity not more than 35 gallons per minute.
 - Depth to water 59 feet below land surface.
 - Date well completed 1970
(Month) (Day) (Year)
- The place(s) of use of water. If same as Item 3, check this box ☒
 $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$, Section _____ Township _____ Range _____
 $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$, Section _____ Township _____ Range _____
 Montezuma Castle National Monument - Well Area supply well
 Attach additional sheet if necessary.
- DATE JUN 3 1982 SIGNATURE OF REGISTRANT (Sgd) Gerard S. Witucki
GERARD S. WITUCKI
CHIEF, DIVISION OF WATER RESOURCES

CHANGE OF WELL INFORMATION

Registration Number 55 629125

I request the following information be changed in Well File Number A(15-6)31cba

Date _____, 19____ Signature of Well Owner _____

STATEMENT OF CHANGE OF WELL OWNERSHIP

I, _____, state that I am (no longer) the (new) owner of the well described below:

Township _____ Range _____ Section _____, _____ $\frac{1}{4}$ _____ $\frac{1}{4}$ _____ $\frac{1}{4}$

Registration #55-_____ File No. _____

Previous Owner _____ New Owner _____

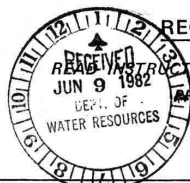
Address _____ Address _____

City _____ State _____ Zip _____ City _____ State _____ Zip _____

NOTE: ARS 45-593 requires that the Department be notified of change of well ownership and that the well owner is required to keep the Department's Well Registration records current and accurate. Well data and ownership changes must be submitted within 30 days after changes take place.

NOTE: SAVE THIS FORM TO REPORT FUTURE
 CHANGES IN OWNERSHIP OR WELL
 DATA SUCH AS PUMP CAPACITY, ETC.

DEPARTMENT OF WATER RESOURCES
99 EAST VIRGINIA AVENUE
PHOENIX, ARIZONA 85004



REGISTRATION OF EXISTING WELLS

READ INSTRUCTIONS ON BACK OF THIS FORM BEFORE COMPLETING
PRINT OR TYPE - FILE IN DUPLICATE

Declaration: The United States gives the verification to the State in the interest of comity, and does not concede that the State has power to regulate the rights of the United States to the use of water.

REGISTRATION FEE (CHECK ONE)

EXEMPT WELL (NO CHARGE) ☒

NON-EXEMPT WELL - \$10.00 ☐

FOR OFFICE USE ONLY

REGISTRATION NO. 629123

FILE NO. A(15-6)31 cba

FILED 6-9-82 AT 1:30

(DATE) (TIME)

INA

AMA

- Name of Registrant:
National Park Service, Western Region, Division of Water Resources
450 Golden Gate Ave., Box 36063, San Francisco CA 94102
(Address) (City) (State) (Zip)
- File and/or Control Number under previous groundwater law:
(A-15-5)31 cba 35-
(File Number) (Control Number)
- a. The well is located within the NE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$, Section 31
of Township 15 N N/S, Range 6 E E/W, G & SRB & M, in the
County of Yavapai.
b. If in a subdivision: Name of subdivision
Lot No. Address
- The principal use(s) of water (Examples: irrigation - stockwater - domestic - municipal - industrial)
unused
- If for irrigation use, number of acres irrigated from well
- Owner of land on which well is located. If same as Item 1, check this box ☒
(Address) (City) (State) (Zip)
- Well data (If data not available, write N/A)
a. Depth of Well 103.5 feet
b. Diameter of casing 6 inches
c. Depth of casing 63 feet
d. Type of casing steel
e. Maximum pump capacity N/A gallons per minute.
f. Depth to water 50 feet below land surface.
g. Date well completed June 12, 1947
(Month) (Day) (Year)
- The place(s) of use of water. If same as Item 3, check this box ☐
 $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$, Section Township Range
 $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$, Section Township Range
Montezuma Castle National Monument - Well Area back-up well
Attach additional sheet if necessary.
- DATE JUN 3 1982 SIGNATURE OF REGISTRANT (Sgd) Gerard S. Witucki
GERARD S. WITUCKI
CHIEF, DIVISION OF WATER RESOURCES

CHANGE OF WELL INFORMATION

Registration Number 55 629123

I request the following information be changed in Well File Number A(15-6)31 cba

Date _____, 19____ Signature of Well Owner _____

STATEMENT OF CHANGE OF WELL OWNERSHIP

I, _____, state that I am (no longer) the (new)
owner of the well described below:

Township _____ Range _____ Section _____, _____ $\frac{1}{4}$ _____ $\frac{1}{4}$ _____ $\frac{1}{4}$

Registration #55-_____ File No. _____

Previous Owner _____ New Owner _____

Address _____ Address _____

City _____ State _____ Zip _____ City _____ State _____ Zip _____

NOTE: ARS 45-593 requires that the Department be notified of change of well ownership and that the well owner is required to keep the Department's Well Registration records current and accurate. Well data and ownership changes must be submitted within 30 days after changes take place.

NOTE: SAVE THIS FORM TO REPORT FUTURE
CHANGES IN OWNERSHIP OR WELL
DATA SUCH AS PUMP CAPACITY, ETC.

REPORT OF WELL DRILLER

Report of Well Driller is required to be made and filed with the State Land Commissioner as required by Section 7, Chapter 12, Senate Bill No. 3, Seventeenth Legislature, First Special Session, 1948. A separate report shall be made for each well and filed within 30 days after completion of the well.

1. Owner Department of Interior, National Park Service
Name
Montezuma Castle National Monument, Camp Verde, Arizona
Address

2. Lessee or Operator None
Name
Address

3. Driller Elley Lee
Name
Cottonwood, Arizona
Address

4. Location of well: Twp. 18 N Rge. 8 E Section 22 1/4 of NW 1/4 of SE 1/4
10-acre subdivision

DESCRIPTION OF WELL

5. Total depth of hole 200 ft.
6. Type of casing 6" pipe, 1" diameter
7. Diameter and length of casing 6" in. from 1 to 64 in. from to in. from to
8. Method of sealing at reduction points No reduction points
9. Perforated from None to to from to from to from to
10. Size of cuts None Number cuts per foot
11. If screen was installed: Length ft. Diam. in. Type None
12. Method of construction Drilled drilled, dug, driven, bored, jetted, etc.
13. Date completed June 12, 1947 Month June Year 1947
14. Depth to water 70 ft.
If flowing well, so state.
15. Describe point from which depth measurements were made, and give sea-level elevation if available Ground level
3' - about 2000 feet
16. If flowing well, state method of flow regulation none

DISCHARGE DATA

17. Well discharge 20 gallons per minute gal. per min. or cu. ft. per sec. or minor's inches.
18. Method of discharge measurement meter weir, orifice, current meter, etc.
19. Drawdown None ft.
20. Purpose of use Domestic
21. Place of use: Twp. 18 N Rge. 8 E Section 22 Legal subdivision Acres
(See 22)
22. Purpose of use Domestic
Twp. 18 N Rge. 8 E Section 22 Legal subdivision Acres
22. If well is part of irrigation system of Irrigation District, Association or Company, omit 23 and give name of project.

Name of Project

EQUIPMENT DATA

23. Kind of pump turbine, centrifugal, etc.
24. Kind of power electric, natural gas, etc.
25. Horsepower rating of motor

DO NOT WRITE IN THIS SPACE
OFFICE RECORD

Received _____ by _____
Filed _____ by _____
File No. _____
Cross-referenced (Name) _____ by _____
Cross-referenced (Basin) _____ by _____
Cross-referenced _____ by _____

(See Other Side)

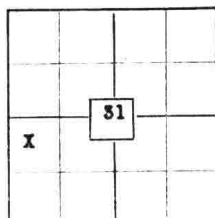
Driller Piley Lee Name _____
Cottonwood Crig, Address _____
 Date June 21st, 1942

FORM W-1 2M 8-46 JAHN-TYLER

DUPLICATE

LAND DEPARTMENT
WATER DIVISION
STATE OF ARIZONA**NOTICE OF INTENTION TO DRILL WELL**

This notice is required under the provisions of Section 6, Chapter 12, Senate Bill No. 3, Seventeenth Legislature, First Special Session, 1945, by any person proposing to drill an irrigation or drainage well having a capacity of more than one hundred gallons per minute.

**LOCATION OF
PROPOSED WELL**

1. Twp. 15 N.
 2. Rge. 5 E.
 3. Section 31
 4. NE 1/4 NW 1/4 SW 1/4
 (10-acre subdivision)

INSTRUCTIONS

Fill out original and duplicate, and mail to Water Division, State Land Department, Phoenix, Arizona.

Duplicate will be returned within 15 days to person giving notice.

**DESCRIPTION OF
PROPOSED WELL**

5. Diameter 6 in.
 6. Estimated depth 200 ft.
 7. Type of casing 6" steel
 8. Estimated depth to water 170 ft.
 9. Proposed use domestic and recreational and fire protection
 10. Drilling will start about June 1947
 Month Year
 11. Driller Riley Lee
 Name
Cottonwood, Arizona.
 Address
 12. Water will be applied to use about July 1947
 Month Year

20. This notice given by United States of America, Dept. of the Interior, National Park Service
 Name
 By E. T. Seoyen, Assoc. Reg. Dir. National Park Service, Santa Fe, New Mexico.

**PLACE OF
PROPOSED USE**

If well is part of irrigation system of Irrigation District, Association or Company, give only name of project.

Montezuma Well Area of Montezuma Castle National Monument
 13. Twp. 15 N. 15 N.

14. Rge. 5 E. 4 E.
 15. Section 31 36
SW 1/4, NW 1/4
 16. NW 1/4 SE 1/4 NE 1/4 SE 1/4
 Legal subdivision
 17. Acres Parts of 261.67
 18. Owner United States of America
Dept. of the Interior.
 Name (or Project)
 19. National Park Service
Merchandise Mart,
Chicago 54, Illinois.

**DO NOT WRITE IN THIS SPACE
OFFICE RECORD**

Received 5-26-47 By lj
 Filed 5-29-47 By lj
 Duplicate Mailed 5-29-47 By lj
 File Number (A-15-5) 31 cba

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
CHICAGO, ILLINOIS

ADDRESS ONLY
THE DIRECTOR, NATIONAL PARK SERVICE

54

May 21, 1947.

MEMORANDUM for the Regional Director, Region Three.

The enclosed Notice of Intention to Drill a Well, in duplicate, should be completed and forwarded to the Water Division, State Land Department, Phoenix, Arizona, in connection with the proposal to drill a well at the Montezuma Well Area of Montezuma Castle National Monument. Please indicate the type of proposed casing in item 7, and the name and address of the well driller in item 11. The title and address of the one signing, either the Regional Director or Regional Engineer, should also be indicated.

Although the ground water law does not require reports on existing wells of less than 100 gallons per hour, it does not seem to exempt any new wells which may be drilled, on the basis of capacity. You will note, however, that the fine print at the top of the notice suggests that the filing for new wells, also, only seems obligatory in connection with wells of more than 100 gpm capacity. It is not clear whether such notices are optional, or not wanted, in connection with the smaller ones. In forwarding the notice, therefore, please ask about the point, and send us two copies of your letter and the reply. Also, please forward the duplicate notice to us for duplicating when it is returned by the State.

A voucher for \$1.00, payable by this Office, is enclosed to accompany the notice.

We also enclose the form for the Well Driller's Report, in duplicate. If the notice is accepted, one copy of this form should be sent to the State Land Department by the driller, and the other should be returned to us for duplicating in a water right assembly. If the notice is returned as needless, by the State Land Department, the driller need prepare only one copy of the log for our purposes.

(SGD) HUGH M. MILLER

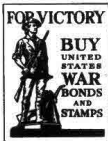
Acting Director.

AvVD:sh.

Enclosure 577.

In duplicate.

cc: Mr. Dunn.

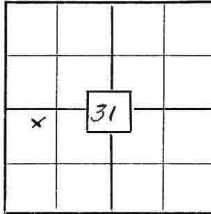


FORM W-1 2M 8-46 JAHN-TYLER

DUPLICATE

LAND DEPARTMENT
WATER DIVISION
STATE OF ARIZONA**NOTICE OF INTENTION TO DRILL WELL**

This notice is required under the provisions of Section 6, Chapter 12, Senate Bill No. 3, Seventeenth Legislature, First Special Session, 1945, by any person proposing to drill an irrigation or drainage well having a capacity of more than one hundred gallons per minute.

**LOCATION OF
PROPOSED WELL**

1. Twp. 15 N
 2. Rge. 5 E
 3. Section 31
 4. NE 1/4 NW 1/4 SW 1/4
 (10-acre subdivision)

INSTRUCTIONS

Fill out original and duplicate, and mail to
er Division, State Land Department, Phoenix,
ona.

Duplicate will be returned within 15 days
person giving notice.

**DESCRIPTION OF
PROPOSED WELL**

5. Diameter 6 in.
 6. Estimated depth 200 ft.
 7. Type of casing _____
 8. Estimated depth to water _____ ft.
 9. Proposed use Domestic & Recreational
+ fire protection
 10. Drilling will
 start about June 47
 Month Year
 11. Driller _____
 Name _____
 Address _____
 12. Water will be applied to use about
July 47
 Month Year

20. This notice given by
United States of America, Dept. of the Interior
National Park Service
 by Regional Engineer, Raptor
 Address
Santa Fe, NM

**PLACE OF
PROPOSED USE**

If well is part of irrigation system of Irrigation
District, Association or Company, give only name
of project.

- Montezuma Well Area of
Montezuma Castle Nat. Monument
 13. Twp. 15 N 15 N
 14. Rge. 5 E 4 E
 15. Section 31 30
SW 1/4 NW 1/4
 16. NE 1/4 SE 1/4 NE 1/4 SE 1/4
 Legal subdivision
 17. Acres Parts of 261.67
United States of America
 18. Owner Dept. of the Interior
 Name (or Project)
National Park Service
 19. Montezuma Well, Chiricahua, Ill.
 Address

**DO NOT WRITE IN THIS SPACE
OFFICE RECORD**

Received _____ By _____
 Filed _____ By _____
 Duplicate
 Mailed _____ By _____
 File Number _____

Land History

Form NPS-L-1

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICEState Arizona

LAND OWNERSHIP RECORD

Tract No. _____

County YavapaiDeed No. 7

Civil Subdivision _____

Area _____ acres

Montezuma Castle Nat. Mon

Name of Park or Area

Right diversion and use recorded with~~Area~~ based on survey of State EngineerDate May 26, 1947.Montezuma well.

Section of Park or Area

Legal Description: Recorded claim to 25 gpm of ground water.(Subject to adjudication if claims exceed supply at future date.)Method of Acquisition: Diversion and use.Appropriation or Source of funds: water rights

Cost (if purchased) or estimated value: _____

Acquired from: State of Arizona.

Accepted by Secretary ()

Opinion of Att'y. Gen.-title in U. S. ()

date: _____

Physical Characteristics: Well 79 feet deep, pump, pipe line, and reservoir.

Improvements on Land at time of Acquisition: _____

Existing or outstanding special use permits, reservations, rights, or rights of way: _____

Report Based on: Records of Water Resources Branch.Prepared by: A. van V. Dunndate: 4/7/48Map References: NM-MC-5308.

Remarks: _____

Supporting Hydro Data

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

REPORT 7-56

Miller Vent

REGION Three	AREA Montezuma Castle Nat'l Monument	COUNTY Yavapai	STATE Arizona
PROJECT OR JOB TITLE Water Well Repair			POP. NO. none
LOCATION IN AREA Behind headquarters museum		MASTER PLAN NO. NM-MONT-2043	BUILDING NO. none
WORKING DRAWING NO. AND TITLE none			
APPROPRIATION TITLE AND SYMBOL 14X1035, Construction, NPS			ACCOUNT NO. MZ-331.13
CONTRACT NO. none		DATE WORK STARTED 6-7-56	DATE WORK COMPLETED 6-11-56
NAME OF CONTRACTOR Wingfield Commercial Company		ADDRESS Camp Verde, Arizona	

COST ANALYSIS

CONSTRUCTION ITEMS	QTY.	UNIT COST IN PLACE	TOTAL COST IN PLACE
Drill well deeper	20'	\$5.00	\$114.80
Rental on boom truck with personal services	4 hrs.	7.50	30.00
Bail well and reset pump	---	---	150.00
Well casing, 5"	100'	1.50	150.00
Equipment operation	68 mi.	.0841	5.72

TOTAL \$450.52

SUMMARY OF EXPENDITURES

PERSONAL SERVICES	\$5.72
OTHER	\$444.80
TOTAL	\$450.52

CHANGE ORDERS

ORIGINAL CONTRACT AMOUNT	\$450.52	DATE	July 22, 1956
FINAL CONTRACT AMOUNT	\$450.52	DATE	July 31, 1956

THIS PROJECT OR JOB HAS BEEN COMPLETED IN ACCORDANCE WITH
APPROVED DRAWINGS, SPECIFICATIONS, AND OTHER STANDARDS

(ATTACH NARRATIVE STATEMENT, PHOTOGRAPHS, AND "AS BUILT" DRAWINGS TO THIS FORM)

(OVER)

Narrative Statement--Water Well Project

On the evening of June 6 the water pump on the headquarters well was found to be operating without producing any water. The Wingfield Commercial Co., Camp Verde, Arizona, sent a boom truck to pull the pipe and cylinder the next day, and it was learned there had been a cavein of fine sand and clay near the bottom of the well. Mr. G. L. Hollamon, who had the only well rig immediately available, agreed to move in and put the well back in operation. First he tried to clean the well, but more material kept coming in. The well was cased down to solid limestone to hold back the sand and clay, and the well drilled approximately 20 feet deeper where another supply of good water was found.

Because of the large crowds of visitors and extreme temperatures during this period, it was necessary to get the well back into operation by the quickest means possible.

Field Accounting Office Clearance date July 31, 1956

Administrative Officer *[Signature]*

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

RECORD OF WELL

1. Location: State Arizona County Yavapai
Nearest P. O. Rimrock Direction from P. O. ESE
 $\frac{1}{4}$ sec. SW31, T. 15 N. R. 3 E.



Locate well on plat of section.

2. Owner: Department of Interior, NPS Address Camp Verde, Arizona
Driller: Riley Lee Address Cottonwood, Arizona
Site selected by: National Park Service Address Camp Verde, Arizona
3. Situation: Is well on upland, in valley, or on hillside? Valley
4. Type of well: Drilled; kind of drilling rig used churn drill
(Dug, driven, bored, or drilled) (Solid tool, jetting, rotary, etc.)
5. Depth of well: 105' ft.; year in which well was finished 1947
Does well enter rock? yes; if so, at what depth? 59' ft.; kind of rock limestone
6. Depth to water: 79' ft.; Amount water rose above level where first struck 60 ft.
7. Diameter: At top 6 inches; at bottom 6 inches.
8. Principal water bed: Rock-limestone
(Gravel, sand, clay, or rock. If rock, state kind)
Depth to principal water bed 79 ft.; thickness of bed 5 ft.
If other water supplies were found, give depth to each 25' seepage from ditch and creek
9. Casings: Kind steel; size 6"; length 64 ft.; between depths of 0 and 64 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
- Screen or Strainer: Was well finished with screen or perforated pipe? no; kind of screen ;
length of screen ft.; diameter inches; size of openings
perforated pipe; size of perforations ; 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 pumped? yes; kind of pump jet-deep well vertical ejector;
size or capacity of pump 150 gal. per hour; kind of power 110 volt, 60 cycle, elect.
12. Yield: Natural flow at present (if any) na gallons per minute; original flow 25 gallons per minute;
well has been pumped at gallons per minute continuously for hours;
quantity of water ordinarily obtained from well gallons per minute
13. Use: For what purpose is the water used? domestic
14. Quality of the water: fresh; is there an analysis? no
(Hard or soft, fresh or salty, etc.)

Name of person filling blank R. S. Leding - Ranger

Date 2/4/48 Address Camp Verde, Arizona

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

G.W. _____ Account 20NP 15
 Type Analysis A-1, no Fe sol'n. USGS CHEMICAL ANALYSIS Project 34
 State Arizona County Yavapai Location 15N.6E.31.100 (near Rimrock, Ariz.)
 Latitude-Longitude _____ Well No. (A-15-6)31-1 Montezuma Well Date Collected 2-23-68
 Owner Montezuma Castle Nat'l. Mon., Box.218 Camp Verde, Date Drilled 6-12-46 Source Drilled Depth (ft) 105 Diam (in) _____
 pH..... 7.5 Temp.(°C) 13 Specific Conductance, micromhos at 25°C 980
 Hardness as CaCO₃: _____ Concentrations in milligrams per liter (mg/L)
 Total, mg/L 416 Silica (SiO₂)..... 19 Bicarbonate (HCO₃)..... 599
 Noncarbonate, mg/L. 0 Calcium (Ca)..... 96 Carbonate (CO₃)..... 0
 Color.. 3 Sodium-adsorption ratio..... 1.3 Sulfate (SO₄)..... 8.6
 %Na.... 24 Tons per acre ft. _____ Magnesium (Mg)..... 43 Chloride (Cl)..... 40
 Density, g/ml at 20°C _____ Sodium (Na)..... 63 Fluoride (F)..... 0.3
 W.B.F. Verde limestone Potassium (K)..... 5.7 Nitrate (NO₃)..... 0.0
 Producing intervals 6-12-47 to present Na+K (Calculated)..... _____ Boron (B)..... 0.83
 W.L. 58' below surface Dissolved Iron (Fe).... _____ Dissolved Solids:
 Sampled after Pumping(Time) 10 min. Total Iron (Fe)..... 2.2 Sum of Constituents..... 571
 Yield 25 GM _____ Residue on Evaporation at 180°C..... 552
 Point of Collection Faucet, picnic area _____
 Clear, but at times is a _____
 Appearance dirty brown color. _____
 Use Dom., Ps _____
 Collected by Jack R. Clark _____
 (Well section) _____
 Remarks: At times this water has a _____
 foul smell, tastes bad, and stains _____
 clothes in wash. _____
 Chemist RLR, BR Checked By EFW _____
SWH, EP _____
 Date Completed 3-21-68 _____
 Date Transmitted _____
 Laboratory No. 663333

Provisional records, subject to revision.

State	County	Lat.	Long.	Seq. No.	Date	Samp. depth	c
61495 Remarks: Source: Drilled DD: 1947 Depth: 105' Producing intervals from: 19' to 79' (static level to main bed) WL: pumping 58' below surface Sampled after pumping: 3 hrs. Yield: 40 GM pump (above measured on 8/13/62) PC: Res. No. 17 Use: Dom., Ps, Air Cond. Rmks: Water from this well often discolored (brown) and strong smelling.							
Br _____ ml				26 28		Radiochemical	
I _____ ml				29 31		Alpha (pc/l) 55	
Alk. as CaCO ₃				32 35		Beta (pc/l) 58	
Free CO ₂				36 38		Ra (pc/l) 61	
SAR				39 41		U (ug/l) 64	
RSC				42 44		Other data (67-79) ^e	
Organics				45 47		Dissolved Solids---ml 100	
MBAS (ABS) _____ ml				48 50		45.2579 pt 42	
				51 54		45.2056	
						0.0523	
a Master card A (21-34) b Master card A (52-66) c Type: 1. Pumped 4. Spigot 2. Bucket 5. Bailor 3. Forest 6. Special d Source of data: 1. USGS 5. Industrial 2. UPHS 6. Private 3. State Health 7. Educational 4. State						e Indicate constituent and card color	
Chemist <u>LEWIS ALARY</u> E. F. WILLIAMS Date began <u>MAY 1 1967</u> Date transmitted _____ Punched by _____ Verified _____						Card S	

Additional records, subject to revision

Montez 2

GW. Type Analysis 1-Inc to sol. U.S. GEOLOGICAL SURVEY ANALYTICAL NOTES Project P.S. Collector Thomas Gibbs

State Arizona County Yavapai City (at or near) Montezuma Well 1/4 sec 31 T15N R4E

Latitude-Longitude _____ Well No. 50 (A-15-6) 31-I Date Collected 3-22-55

Owner National Park Service Box 218 Camp Verde, Arizona Date Drilled 6-12-47 Cased to _____ Depth (ft) 105 Diam. (in.) 6

pH 7.5 Temp (°F) _____

Hardness as CaCO₃ 383

Total _____

Noncarbonate 0

Color 1 S.A.R. 1.2

% Na 23 T/ot 0.69

Density (g/ml) _____

W.B.F. Verde Limestone?

Producing Intervals all year

W.L. 19' below surface

Sampled after Pumping (Time) _____

Yield 25 G.M. pump est.

Point of Collection office tap

Appearance Clear

Use Dom., Public Supply, Air Cond.

Remarks:

LEWIS ALARY Checked By 840

Chemist _____

Date Completed MAY -4 1955

Date Transmitted _____

Laboratory No. 56696

Spec. Cond. (micromhos at 25°C): T ₂₅ R KCl 2931 R Sample 281		PPM		EPM	
Silica	1.59.6 vol 10	21	21		
Calcium	1.87 vol 10	94	94	4.69	
Magnesium	30.40 vol 25	37	37	3.07	
Sodium	2.5-50 vol 100 range	54	54	2.35	
Potassium	57.3 vol 10 range	5.7	5.7	0.15	
Na+K (Calculated)					
Iron	1.84 vol 2.5				
Total	0.066	0.12			
TOTAL CATIONS		10.26			
Bicarbonate	26.90 vol 50	538	538	8.82	
Carbonate	0	0	0	0.00	
Sulfate	0.90 vol 10	13	13	0.27	
Chloride	1.92 vol 2.5	36	36	1.02	
Fluoride	0.00 vol 10	0.2	0.2	0.01	
Nitrate	11.31 vol 10	0.2	0.2	0.00	
Boron	1.32 vol 1.3	0.80	0.80		
Sum of Constituents	527	527			
Residue on Evaporation at 180°C	45.2772 vol 100	510	510		
dish	0.0510				
TOTAL ANIONS				10.12	

PROVISIONAL RECORDS, SUBJECT TO REVISION

FORM 9-1367 (9-1960)
U. S. DEPT. OF INTERIOR
GEOLOGICAL SURVEY

(A-15-6)31-1

ANALYTICAL STATEMENT - GW

COUNTY Yavapai (Ariz)

NPS

LAS NO. 54100

Location 11 miles N & E of
Camp Verde, Ariz.

NW 1/4 sec. 31 T15N R6E

Source (type of well) Drilled

Owner USDI, NPS, Montezuma

Castle Nat. Mon., Camp Verde

Date dril 6/12/47 Cased to ft

Depth 105' Diam

Verde limestone

Water level 58 ft below surf.

Sampled after pumping 10 minutes

Yield 25 gpm (max) pump

Pt of cell Faucet in pump house

Appearance Clear

Temp (°F) 68 Use Dom., Ps

Collector E. Lehnert, Supvry, Ranger

Chemist LIA

Date completed May 12, 1964

Checked by RLI

Data transmitted
NPS & AGW

Date of collection Apr. 12, 1964

Ignition Loss 1 Color 1

Dissolved Solids:

Residue at 180°C 526

Calculated (Sum) 534

Tons per Acre Foot 0.72

Hardness as CaCO₃ 385

Non-carbonate Hardness 0

% Na 24 % Ca 1.3 % Mg 7.4

Specific Conductance

(microhms at 25°C) 912

Producing inter-

vals from 6/12/47

to present.

Provisional records, subject to revision.

	gpm	ppm
SiO ₂		18
Fe (total)		0.02
Ca	4.74	95
Mg	2.96	36
Na	2.48	57
K	0.15	6.0
Na + K	10.33	
HCO ₃	8.83	539
CO ₃	0.00	0
SO ₄	0.29	14
Cl	1.16	41
F	0.02	0.3
NO ₃	0.02	1.4
	10.32	B 0.62

Other Supporting Information

KMR



United States Department of the Interior

NATIONAL PARK SERVICE

WESTERN REGION

450 GOLDEN GATE AVENUE, BOX 36063
SAN FRANCISCO, CALIFORNIA 94107

JUN 9 '82

IN REPLY REFER TO:

L54 (WR-RNW)

June 4, 1982

Mr. Wesley E. Steiner, Director
Department of Water Resources
99 E. Virginia Avenue
Phoenix, Arizona 85004

Reference: Arizona Groundwater Management Act
(1980), A.R.S. 45-593

Dear Mr. Steiner:

Enclosed are the completed well registration forms for existing wells within the State of Arizona owned by the United States Government, Department of the Interior, National Park Service, Western Region. These forms have been completed for the following areas: Casa Grande National Monument (1 well), Chiricahua National Monument (8 wells), Coronado National Memorial (6 wells), Fort Bowie National Historic Site (1 well), Grand Canyon National Park (no wells), Lake Mead National Recreation Area (14 wells), Montezuma Castle National Monument (3 wells), Organ Pipe Cactus National Monument (21 wells), Petrified Forest National Park (3 wells), Saguaro National Monument (14 wells), Tonto National Monument (1 well), Tumacacori National Monument (3 wells), Tuzigoot National Monument (1 well), and Walnut Canyon National Monument (1 well). The location of these National Park Service areas are shown on the enclosed map (in red).

Of the total 77 wells being registered, 12 wells have a pump capacity exceeding 35 gallons per minute and therefore payment in the amount of \$120.00 (\$10.00 X 12) will be forwarded to your office by the U.S. Treasury Department under separate cover as the registration fee for these non-exempt wells.

If there are any questions with regards to this matter, or if we can be of further assistance, please contact Gerard S. Witucki, Chief, Division of Water Resources, (415) 556-8660, of this Office.

Sincerely yours,

FOR John E. Chapman

Howard H. Chapman
Regional Director, Western Region

Enclosures

See attached sheet for bcc's



Rocky Mountain Regional Office	Initial & Date
Regional Director	4/2/82
Deputy Regional Director	
Administration	
Park Operations	ML
Plan & Resource Pres.	
Coop Prog.	
Communications & P.A.	
EEI	
Oper Eval	
Actions Taken	

bcc's sent to:

Superintendent, Casa Grande, w/respective encls., w/blank form & w/o map
Superintendent, Chiricahua/Fort Bowie, w/respective encls., w/blank form & w/o map
Superintendent, Coronado, w/respective encls., w/blank form & w/o map
Superintendent, Grand Canyon, w/o encls.
Superintendent, Lake Mead, w/respective encls., w/blank form & w/o map
Superintendent, Montezuma Castle/Tuzigoot, w/respective encls., w/blank form & w/o map
Superintendent, Organ Pipe Cactus, w/respective encls., w/blank form & w/o map
Superintendent, Petrified Forest, w/respective encls., w/blank form & w/o map
Superintendent, Saguaro, w/respective encls., w/blank form & w/o map
Superintendent, Tonto, w/respective encls., w/blank form & w/o map
Superintendent, Tumacacori, w/respective encls., w/blank form & w/o map
Superintendent, Walnut Canyon, w/respective encls., w/blank form & w/o map
General Superintendent, Southern Arizona Group, w/respective encls., w/blank form & w/o map
Field Solicitor, San Francisco Office - Attn: J. Burke, w/encls. & w/blank form
Field Solicitor, Phoenix Office - Attn: W. Swan, w/map, w/blank form & w/example of
completed form
Regional Director, Rocky Mountain Region - Attn: W. McKeel, w/map, w/blank form &
w/example of completed form
Regional Director, Southwest Region - Attn: G. Moore, w/map, w/blank form & w/example
of completed form
(WR)AF, w/SF 1034, w/o encls.

Potential Legal Problems in Montezuma Castle Well Area

The issues that I see as arising from this docket are:

I. It is important to note that the land Wales Arnold owned and which he irrigated with water from Beaver Creek never included land in Section 31, where Montezuma Well is located. The adjudication of 1906, though not referring to any specific parcel of land, refers to 101 acres of land owned by Back "under his appropriation made in the year 1870" (referring to the location made by Wales Arnold). The problem is that Arizona, in the case of Salt River Valley Users' Association v. Kovacovich, 3 Ariz. App. 28, 411 P. 2d 201(1966) held that:

"A water right is attached to the land on which it is beneficially used and becomes appurtenant thereto, and that the right is not in any individual or owner of the land. It is in no sense a floating right, nor can the right, once attached to a particular piece of land, be made to do duty to any other land...."

If the water right which Wales Arnold perfected on Beaver Creek, and which was recognized and protected in the adjudication of 1906, was appurtenant to the land which he owned, William Back had no right under Arizona law to later change the place of use from land in Section 36 to the land he patented in Section 31. (Nor would we, his successor in interest, have such a right.)

The question presented is will a court hold that the only land which we have a right to irrigate is that which we own in Section 36?

Additionally, there is no evidence in our files as to when the change in diversion and place of use occurred. Arizona became a state in 1912 and Back may have diverted water from Montezuma Well and used it in Section 31 anytime before or after this date.

Also, Arizona Revised Statutes, Section 45-172, relating to the transfer of water rights and the limitations thereto, provides that under appropriate circumstances a water right may be severed or transferred from the land to which it is appurtenant.

II. Arizona Revised Statutes, Section 45-181, require a filing of a claim for all water rights asserted by all persons using or claiming the right to withdraw or divert and make beneficial use of public waters of the State of Arizona. "Person" includes the United States if claiming water rights under the laws of the State of Arizona. Specific exceptions to this section are water rights issued pursuant to a permit or certificate issued by the State or "to rights acquired or validated by contract with the United States of America, court decree or other adjudication." (See specifically Section 45-181 (B)). This last clause, "court decree or other adjudication", appears to relieve us of the duty of filing with the State in the case of Montezuma Well. This is due to the court decree of 1906 in which our grantor, W. Back, was given a right to 101/473 of the flow of Beaver Creek. This was proportional to the amount of irrigable acreage which he owned to that owned by the other parties to the litigation.

A potential problem arises from the fact that the decree was for the division of Beaver Creek of which Montezuma Well was a tributary at that time. Back changed his point of diversion from Beaver Creek to Montezuma Well, and though presumably protected under the court decree, it may bear no relation to the amount which Back subsequently took from the well and that which he had a right to under the terms of the decree. This decree, now close to 70 years old, gave Back a proportionate share of the flow of Beaver Creek based on equities existing at that time. The outcome of a court decision under circumstances as they exist today is highly speculative. A NPS filing with the State would indicate a relinquishment of any jurisdiction which we now have, but present federal jurisdiction is uncertain. (As a sidelight, the court in the 1906 adjudication retained jurisdiction over the distribution of the waters from Beaver Creek. How long may a court in equity retain jurisdiction?)

When the NPS purchased the property which contains Montezuma Well, there were reservations in the deeds issued to previous grantees which divided the water right into four parts; $\frac{1}{2}$ to W. Back (now the NPS) and $\frac{1}{6}$ to each of the subsequent downstream owners. I believe these reservations are binding upon the U.S. and are property which are compensable upon a taking.

What the NPS would gain by filing with Arizona is a water right protected by state law to a specific amount of the flow of Montezuma Well. We now believe we are entitled to $\frac{1}{2}$ of the flow of Montezuma Well but we have no legal basis for claiming this. Also, all of the downstream users derive their rights from W. Back and not under the court decree of 1906, and therefore their rights are as uncertain as ours. Since water is of high value in the area and the landowners downstream have historically been inclined to take steps to protect their water supply, any action taken to protect our rights would be of great value in the future should these parties seek to (1) acquire new or additional water rights under state law or (2) attempt to acquire a specific amount of water by a court decision.

III. The State of Arizona could potentially reduce the amount of water that the NPS may appropriate under the 1906 adjudication to that amount of actual beneficial use as recognized under State law (See Arizona Revised Statutes, Section 45-141C which places wildlife uses as the least preferred among the various beneficial uses recognized).

IV. It is also important to note that our well is most likely taking water from the same basin that supplies water to Montezuma Well and we are in effect diverting water from Beaver Creek when we take water from the drilled well (i.e., Montezuma Well is a tributary to Beaver Creek and the drilled well is diverting a portion of the flow of Montezuma Well).

3/7/75 Mike Ackerman
Legal Clerk
Water Resources Division
Western Region

NOTE: ON FILE IN
DEC IS DRWG.
NM-MC - 3107A -
2 SHEETS SHOWING
PROFILE OF WATER
LINE & MONTEZUMA
WELL LOCATION (SEC.
31, R 6E, T 15 N)

15*

Region Three
Santa Fe, New Mexico

JUN 6 1961

Memorandum

To: Director

From: Assistant Regional Director

Subject: Water Analyses, Domestic Water Wells, Montezuma
Castle National Monument

Attached are copies of water analyses made on the domestic well at Montezuma Castle and the domestic well at Montezuma Well, prepared by Arizona State Health Laboratory. The Laboratory Numbers are: 31624 and 31625.

We have placed copies of these in our water rights docket - No. 31624 in Docket No. 1 and No. 31625 in Docket No. 2. By copies of this memorandum we are sending these to WODC for insertion in their docket.

(SIGNED)

James F. Carpenter
Acting Regional Director

In duplicate

Attachments

✓ Copy to: Chief, WODC

W O D C	
JUN -9 '61	
1	Mr. [Signature]
2	Mr. [Signature]
3	Mr. [Signature]
ACTION TAKEN - DATE	
None	

6



IN REPLY REFER TO:

L-54

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
Region Three
Santa Fe, New Mexico

DEC 21 1960

DEC 27 '60

CHIEF	
ADM.	
PERM.	
P. & P.	
ASST.	
INSTR.	
L.A.	
STUD.	
PAID	
SFTY	
TRAINING	
FAKED	

Handwritten notes and signatures:
- "all" (circled)
- "M. J. Allen" (signature)
- "12/23/60" (date)
- "none" (written across bottom)

Memorandum

To: Chief, Western Office of Design and Construction

From: Regional Director

Subject: Water Right Docket No. 2, Well B, Montezuma Well Area,
Priority May 26, 1947, Montezuma Castle National Monument

We are attaching your copy of Water Right Docket No. 2, Well B, Montezuma Well Area, Priority May 26, 1947, Montezuma Castle National Monument for your water rights files. This docket was received from the Southwestern Archeological Center at Globe, Arizona and has been brought up to date in this office for transmittal to you.

Handwritten signature of Thomas J. Allen

Thomas J. Allen
Regional Director

Attachment

In duplicate

Copy to: Director (2)
Superintendent, Montezuma Castle National Monument

WR copy
G M
154-081

September 9, 1959

Memorandum

To: Regional Director, Region Three
From: Acting Chief, Water Resources Section
Subject: Position of Well Drilled Under Contract 14-10 333-445,
Montezuma Castle

Review of Drawing HM MC/3108-B informs us that the recently drilled well is in a location that is in nominal agreement with the one designated as Diversion No. 2 on the cancelled application, (see Docket 1), say not more than 50 feet off in either N.-S. or E.-W. directions. On the application, which was cancelled because it was not required at the time, being ruled not a diversion from surface resources, the tie to the N.E. corner was: "bears N 52° 09' E, 1336 ft." In the event it should be necessary to file in the future due to modification of Arizona law, we would like to be advised, as time permits, of any appreciable difference in a tie to the "as built" well No. 2 and the tie shown on the application.

SIGNED

Gordon W. Robertson
Acting Chief, Water Resources Section

Copy to: Superintendent, Montezuma Castle
Chief, WRC
Mr. Dunn

GWRobertson:1ct

*Letter File
Montezuma*

WR copy

**Region Three
Santa Fe, New Mexico**

SEP 3 - 1959

Memorandum

To: Director
From: Acting Regional Director
Subject: Log of Wells, Pump Tests, Montezuma Castle and Wupatki

Our records indicate that we forwarded to your office on December 12, 1958 the log of the well and related pump tests at Montezuma Castle.

We are enclosing replacement copies of the log of the well and pump tests at Montezuma Castle. We are also enclosing copies of the well log and pump tests at Wupatki.

(SIGNED)

**Harthan L. Bill
Acting Regional Director**

In duplicate ✓

Attachments

**Copy to: WDC (2) w/attachments
Supt., Montezuma Castle w/o attachments
Supt., Wupatki w/o attachments**

Letter
F11

WR copy

**Log of Water Well Drilled at Montezuma Castle National Monument
under contract 14-10-333-445**

October 15, 1958

0 to 10 ft. Top Soil

10 to 20 ft. Soil with drift rocks

20 to 25 ft. loose gravel, water worn

25 to 33 ft. large river boulders

33 to 47 ft. soft clay and lime that laid in layers

47 to 53 ft. hard crystalized lime

53 to 78 ft. softer lime with layers of clay

78 to 80 ft. hard crystalized lime

80 to 87 ft. hit first water in brownish lime that was porous. The water
raised 17 ft.

87 to 104 layers of soft brown clay that made the bit bog. This clay did
not mix good with water

104 to 118 ft. hard white lime with layers of clay

118 to 123 ft. very hard lime. The hardest drilled yet.

123 to 130 ft. soft lime and red clay that acted like bentonite

130 to 134 ft. soft water baring lime that was light in weight

134 to 153 ft. hard lime with layers of soft lime about six inches thick.
No clay was present

153 to 160 ft. dark brown lime with water crystals in it. This lime is
very light in weight when dry


Charles L. Hellman
Contractor

Extra copy - one copy
already filed in Dkt. 1

MONTEZUMA CASTLE NATIONAL MONUMENT

Sheet 1 of 1

ATTEMPT TO ESTABLISH MAXIMUM YIELD TEST35 G.P.M.

Static Water Level 63 Feet

Draw Down to		In	Draw Down to		In
73	Feet	1 min. 14 sec.	80.71	Feet	16 min.
75.71	"	2 "	81.14	"	17 "
78.24	"	3 "	81.37	"	18 "
79.60	"	4 "	81.53	"	19 "
80.20	"	5 "	81.57	"	20 "
80.01	"	6 "	81.70	"	21 "
79.20	"	7 "	81.77	"	22 "
79.50	"	8 "	81.83	"	23 "
80.20	"	9 "	81.89	"	24 "
80.71	"	10 "	81.95	"	26 "
81.16	"	11 "	82.02	"	28 "
81.31	"	12 "	82.09	"	30 "
81.33	"	13 "	82.10	"	33 "
80.90	"	14 "	82.11	"	36 "
80.74	"	15 "	82.12	"	43 "

- - - - -

Recovery

From 82.12 Feet to 70 Feet in 1 min.
 " 70. " " 69 " " 3 "
 " 69. " " 68 " " 4 "

MONTEZUMA CASTLE NATIONAL MONUMENT

Sheet 1 of 2

DESIRED YIELD TEST

11-25-58

45 G.P.M.

Start - 11:02 a.m.

Finish 11/26/58 9:17 a.m.

Static Water Level 63 Feet.

Draw Down to	In	Draw Down to	In
73 Feet	0 min. 33 sec.	92.10 Feet	67 min.
77 "	1 " 30 "	92.08 "	70 "
78.86 "	2 "	91.90 "	75 "
80.40 "	2 " 30 "	93.46 "	80 "
81.44 "	3 "	93.70 "	85 "
82.32 "	3 " 30 "	93.72 "	90 "
82.91 "	4 "	93.72 "	95 "
83.47 "	5 "	93.70 "	100 "
83.81 "	6 "	93.70 "	105 "
84.19 "	7 "	93.90 "	110 "
84.58 "	8 "	94. "	115 "
84.94 "	9 "	93.75 "	120 " (2 hrs.)
85.27 "	10 "	93.92 "	125 "
86.02 "	11 "	93.80 "	130 "
86.63 "	12 "	93.75 "	135 "
87.03 "	13 "	93.85 "	140 "
87.29 "	14 "	93.70 "	145 "
87.51 "	15 "	94.16 "	150 "
88.15 "	17 "	94.10 "	155 "
88.40 "	18 "	94.05 "	160 "
88.60 "	19 "	94. "	170 "
88.95 "	20 "	94.20 "	180 " (3 hrs.)
89.21 "	21 "	94.10 "	190 "
89.87 "	22 "	94.15 "	200 "
90.23 "	23 "	94.10 "	215 "
90.34 "	24 "	94.20 "	230 "
90.47 "	25 "	94.15 "	240 " (4 hrs.)
90.59 "	27 "	94.20 "	270 "
90.78 "	30 "	94.20 "	300 " (5 hrs.)
91.06 "	33 "	95.10 "	330 "
91.25 "	36 "	95.60 "	345 "
91.45 "	39 "	95.60 "	360 " (6 hrs.)
91.66 "	42 "	96.10 "	390 "
91.74 "	45 "	96.40 "	420 " (7 hrs.)
91.94 "	48 "	95.45 "	450 "
92.08 "	51 "	95.50 "	480 " (8 hrs.)
91.50 "	54 ") Dropped	95.60 "	510 "
91.36 "	57 ") to	95. "	540 " (9 hrs.)
91.66 "	60 ") 43 G.P.M.	95. "	570 "
91.90 "	63 ")	95. "	600 " (10 hrs.)
92.04 "	65 " Returned to 45 G.P.M.	95.50 "	630 "

DESIRED YIELD TEST

Sheet 2 of 2

Draw Down to	In	Draw Down to	In
95.20 Feet	660 min. (11 hrs.)	95.70 Feet	1020 min. (17 hrs.)
95.20 "	690 "	95.60 "	1050 "
95.25 "	720 " (12 hrs.)	95.70 "	1080 " (18 hrs.)
95.40 "	750 "	95.60 "	1110 "
95.50 "	780 " (13 hrs.)	95.80 "	1140 " (19 hrs.)
95.60 "	810 "	95.70 "	1170 "
95.60 "	840 " (14 hrs.)	95.75 "	1200 " (20 hrs.)
95.70 "	870 "	95.25 "	1230 "
95.30 "	900 " (15 hrs.)	95.30 "	1260 " (21 hrs.)
95.60 "	930 "	95.25 "	1290 "
95.80 "	960 " (16 hrs.)	95.30 "	1320 " (22 hrs.)
95.60 "	990 "	95.50 "	1335 " 22 hrs. 15 min.

Recovery

From	95.50	Feet	to	88.	Feet	in	0 min. 6 sec.
"	88.	"	"	78.	"	"	2 "
"	78.	"	"	76.	"	"	3 "
"	76.	"	"	75.	"	"	4 "
"	75.	"	"	73.75	"	"	5 "
"	73.75	"	"	72.80	"	"	6 "
"	72.80	"	"	71.10	"	"	8 "
"	71.10	"	"	69.80	"	"	10 "
"	69.80	"	"	67.60	"	"	15 "
"	67.60	"	"	66.60	"	"	20 "
"	66.60	"	"	66.	"	"	25 "
"	66.	"	"	65.70	"	"	30 "
"	65.70	"	"	65.20	"	"	45 "
"	65.20	"	"	65.	"	"	60 "

MONTEZUMA CASTLE NATIONAL MONUMENT

Sheet 1 of 2

MAXIMUM YIELD TEST

11-24-58

70 G.P.M.

Start - 1:10 p.m.

Finish 7:10 p.m.

Static Water Level 63 Feet.

Draw Down to	In	Draw Down to	In
73 Feet	0 min. 8 sec.	129.07 Feet	41 min.
83 "	1 "	131.63 "	42 "
86.69 "	3 "	131.83 "	43 "
88.49 "	4 "	132.10 "	44 "
91.78 "	5 "	132.31 "	45 "
94.83 "	6 "	132.32 "	46 "
97.65 "	7 "	132.34 "	48 "
99.73 "	8 "	132.41 "	49 "
101.80 "	9 "	136. "	50 "
105.53 "	11 "	137.36 "	51 "
107.08 "	12 "	137.43 "	52 "
108.08 "	13 "	137.50 "	53 "
108.77 "	14 "	137.50 "	54 "
109.19 "	15 "	137.60 "	55 "
109.67 "	16 "	137.60 "	56 "
110.45 "	17 "	137.50 "	60 "
111. "	18 "	137.60 "	65 "
111.36 "	19 "	137.50 "	70 "
111.63 "	20 "	137.40 "	75 "
111.96 "	21 "	137.40 "	80 "
112.38 "	22 "	137.40 "	85 "
113.60 "	23 "	137.40 "	90 "
115.23 "	24 "	137.40 "	95 "
116.80 "	25 "	137.35 "	100 "
118.46 "	26 "	137.30 "	105 "
119.89 "	27 "	137.30 "	110 "
120.75 "	28 "	137.30 "	115 "
121.35 "	29 "	137.30 "	120 " (2 hrs.)
121.90 "	30 "	137.30 "	150 "
122.30 "	31 "	137.30 "	180 "
122.94 "	32 "	137.30 "	210 "
123.40 "	33 "	137.30 "	240 "
123.92 "	34 "	137.60 "	270 "
125.14 "	35 "	138. "	300 " (5 hrs.)
125.62 "	36 "	138. "	330 "
126.58 "	37 "	137.60 "	360 " (6 hrs.)
127.57 "	38 "		
128. "	39 "		
128.40 "	40 "		

Sheet 2 of 2

Recovery

From 137.60 Feet to 125 Feet in 1 Minute					
" 125.	" "	100	" "	4	"
" 100.	" "	90	" "	6	"
" 90.	" "	80	" "	8	"
" 80.	" "	75	" "	12	"
" 75.	" "	70	" "	18	"
" 70.	" "	68	" "	23	"

MONTEZUMA CASTLE NATIONAL MONUMENT

Sheet 1 of 1

ATTEMPT TO ESTABLISH MAXIMUM YIELD TEST80 G.P.W.

Static Water Level 63 Feet

Draw Down to	In	Draw Down to	In
73 Feet	0 min. 3 sec.	113.55 Feet	13 min.
88 "	2 " 36 "	116. " "	14 "
93 "	3 " 33 "	118.47 "	15 "
98 "	4 " 57 "	121.04 "	16 "
101.26 "	6 "	123.19 "	17 "
105.44 "	7 "	126.44 "	18 "
107.55 "	8 "	128.73 "	19 "
109.25 "	9 "	133.23 "	20 "
110.36 "	10 "	137.08 "	21 "
110.99 "	11 "	140.53 "	22 "
111.50 "	12 "		

- - - - -

Recovery

From	140.53 Feet	to	124 Feet	1 min.
"	124.	"	"	100 " 2 "
"	100.	"	"	90 " 4 "
"	90	"	"	85 " 5 "
"	85	"	"	80 " 7 "
"	80	"	"	75 " 10 "
"	75	"	"	70 " 16 "
"	70	"	"	68 " 20 "

MONTEZUMA CASTLE NATIONAL MONUMENT

Sheet 1 of 1

ATTEMPT TO ESTABLISH MAXIMUM YIELD TEST100 G.P.M.

Static Water Level 63 Feet.

<u>Draw Down</u> <u>to</u>		<u>In</u>	
78	Feet	0	min. 10 sec.
88	"	1	" 30 "
93	"	2	" 45 "
98	"	4	" 15 "
101	"	6	"
104	"	7	"
106	"	8	"
108	"	9	"
111	"	10	"
112	"	11	"
114	"	15	"

Note: Could not hold 100 G.P.M.
Discharge dropped to 90 G.P.M.
last 2 minutes

- - - - -

Recovery

From	114	Feet	to	125	Feet	in	1	min.
"	125	"	"	100	"	"	3	"
"	100	"	"	90	"	"	5	"
"	90	"	"	80	"	"	8	"
"	80	"	"	70	"	"	11	"
"	70	"	"	68	"	"	17	"

MONTEZUMA CASTLE (CASTLE AREA)
Notes at Regional Office
August 22, 1957

1926 well went dry in 1950.

A replacement was dug near 1926 well, but not as shown in Application A-1744.

Regional Office docket was in terrible shape. We should send outline of Washington Office docket for guidance in bringing it up to date, in good order.

L54-L

August 9, 1957

Memorandum

To: Regional Director, Region Three
From: Chief, Water Resources Section
Subject: Well B, Docket 2, Montezuma Castle

With copies of this memorandum we are sending you and the Superintendent copies of attached completion report, which we assume to be applicable to Well B, and should be filed in Docket 2. We are sending WODC a Docket 2 folder with the record of well as drilled in 1947 and the same completion report. The well appears to have been deepened from 105 feet to 125 feet in June 1956.

SIGNED
A. van V. Dunn
Chief, Water Resources Section

Attachment

Copy to: Superintendent, Montezuma Castle, w/c attachment
Chief, WODC (2), with docket folder

NO COPY MADE IN MAIL ROOM

WESTERN OFFICE	
DESIGN & CONSTRUCTION	
AUG 12 1957 A.M.	
CHIEF	
ADMIN. ASSIST.	
PERSONNEL	
PLANS & PROG.	
SAFETY	
ARCHITECT	
ENGINEER	3
LAND. ARCH.	
1 Cronley 8/12	
2 van V. Dunn 8/12	
ACTION TAKEN—DATE	
none	

4



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

In reply refer to:
LSA MONT

December 17, 1951

Memorandum

To: Regional Director, Region Three
From: Acting Chief, Water Resources Branch
Subject: Water Right Docket No. 2, Montezuma Castle National Monument

In accordance with our current procedure in connection with the numbering and filing of water right assemblies, we attach Montezuma Castle National Monument Water Right Docket No. 2, formerly Deed No. 7, for transmittal to the Superintendent of the area. This is the original assembly which has previously been held in the files of the Washington Office, and is henceforth to be retained by the Superintendent as the official record of this water right. His present assembly of Deed 7 should be destroyed. The deed number on your own assembly should be changed to the new docket number before transmittal to the Superintendent.

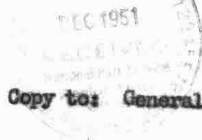
(SGD) GORDON W. ROBERTSON
Gordon W. Robertson
Acting Chief, Water Resources Branch

In triplicate

Attachment

Copy referred to Supt., Montezuma Castle, Jan. 29, 1952:

Please comply with Mr. Robertson's instructions concerning change in numbering and filing of former Deed 7, now Water Right Docket No. 2, but instead of destroying your present assembly, please forward it to General Superintendent Davis for his files.



Land Division
Region Three Office

Copy to: General Supt., SWNM ✓

C O P Y

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

Region Three
Santa Fe, New Mexico

June 22, 1951

Memorandum

To: Director

From: Regional Engineer

Subject: Clarification of Well Location, Montezuma Castle

Mr. Robertson's memorandum of June 18 calls attention to an error in the location of the new well at Montezuma Castle as given in my memorandum of January 12.

The location I furnished at that time was in error in that I used the wrong tie from Application No. A-1744 in computing the tie to the new well. The new well is 25 feet from the existing well adjacent to the Administration Building, and from the new well the northeast corner of Sec. 17, T.14N., R.5E, bears N.69°32'43"E., 1,511.33 feet.

It is hoped that with this information you will be able to establish the location of the new well.

/s/ J. R. Lassiter

J. R. Lassiter
Regional Engineer

Copy to: General Supt., SWNM
in duplicate



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

In reply refer to:
15039 MONT

June 18, 1951

Memorandum

To: Regional Director, Region Three
From: Acting Chief, Water Resources Branch
Subject: Request for Clarification Regarding Well Location,
Montezuma Castle National Monument

In Mr. Lassiter's memorandum of January 12, a new well was described as approximately 20 feet from the old well and tied to the northeast corner of Section 17, south 51°30' 1323 feet. (By elimination of the other alternative, this was assumed to be south 51°30' west, 1323 feet, the omission of the word west being of no great consequence.)

The tie to the only "old well" on our record map, in the assembly of Water Right Deed 3 (see MT-MONT-4978, sheet 2 of 2 sheets, Feb. 8, 1937), which is designated as an existing pump, from the same section corner, is S. 69°55' W. 1534.3', which cannot be reconciled to the 20' from old well reference in the subject letter, however, approximate.

There is on this map a tie to a proposed pump which fits very nicely with the description, but this Office has no record of a well having been drilled in that immediate vicinity.

This Office concurs that no appropriation of water need be applied for in this case, but requests clarification of well location for record purposes.

(Sgd) Gordon W. Robertson
Gordon W. Robertson
Acting Chief, Water Resources Branch

In duplicate

→ Copy to: Mr. Dunn

GWRobertson:sh

C O P Y

In reply refer to:
D5039 MONT

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
Region Three
Santa Fe, New Mexico

January 12, 1951

Memorandum

To: Director

From: Regional Engineer

Subject: Water Rights, Montezuma Castle National Monument

In Mr. Demaray's memorandum of January 9, he asked for the location of the new well at Montezuma Castle. The well is located approximately 20 feet from the old well and on the south side of the building. I calculate the line to the well from the northeast corner of Section 17 to be south 51° 30' 1323 feet.

The new well is in the same aquifer as the old well. The old well was located so close to the building that it was impossible to get a drill rig over it to deepen it. I am confident that the well is not supplied by the underground flow of Beaver Creek but is independent underground water. Such being the case, a well of this size is not subject to appropriation under the Arizona law. On this basis it will be satisfactory to withdraw application A-1744.

/s/ J. R. Lassiter

J. R. Lassiter
Regional Engineer



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

In reply refer to:
D5039 MONT

JAN - 9 1951

Memorandum

To: Regional Director, Region Three
From: Associate Director
Subject: Wells and Water Rights--Montezuma Castle National Monument

By memorandum of December 29 from Mr. Lassiter we received a copy of the Record of Well dated December 24 and relating to the well drilled in 1950, but the exact location was not shown. In order to complete our records, please advise whether the location is nominally as shown on sheet 2 of drawing NM-MONT-4978 in Deed 3, S52°09'W 1336 feet from the northeast corner of Section 17. If not, please advise as to the correct tie.

From the Record of Well submitted in 1948, and discussion by Messrs. Lassiter and Dunn, when the latter was in your office in December, it also appears that the original well went dry last summer although Beaver Creek did not go dry. Since the record of that well, dated April 12, 1948, and that of the new well, dated December 24, 1950, both indicate that the water is probably obtained from a limestone formation or below it, and the behavior of the water in the old well has differed from that in the stream, we assume that the sources of supply are different. Since the later Record of Well also indicates that the water is not under artesian pressure, it is also reasonable to classify it as percolating water.

From these observations, the water in the wells does not seem to be subject to appropriation at this time. Therefore, it will be appreciated if you will confirm these statements. If you can do so, we will then withdraw Water Right Application A-1744, Permit A-1764, as filed in Deed 3, in order to eliminate the need for further action under existing water laws.

(SGD) A. E. DEMARAY
Associate Director

In duplicate

Copy to: Mr. Dunn

AvanVDunn:sh

C O P Y

D5039 MONT

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
Region Three
Santa Fe, New Mexico

December 29, 1950

Memorandum

To: Director
From: Regional Engineer
Subject: Record of Well, Montezuma Castle

There is enclosed a copy of Superintendent Cook's
"Record of Well" covering the new well which was drilled
at Montezuma Castle National Monument this fall.

/s/ J. R. Lassiter
Regional Engineer

Attachment 1

Copy to: Superintendent, Montezuma Castle



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

1948 AUG 18 AM 9:22 AUG 17 1948

WR Files

1. Kitting
J. Kitting
K

MEMORANDUM

To: Chief, Water Resources Branch, National Park Service.

From: Acting Director, Geological Survey.

Subject: Record of Well, Montezuma Castle National Monument.

Thank you very much for the record of the well drilled at the headquarters area of Montezuma Castle National Monument in 1928, which was sent to this office with your memorandum of August 6. This record is being placed on file in our Tucson Ground Water Office.

We will be interested in any further information on the well which may be obtained when your hydraulic engineer visits the area.

Thomas B. Kolan
Acting Director.

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

ADDRESS ONLY
THE DIRECTOR, NATIONAL PARK SERVICE

~~CHICAGO, ILLINOIS~~
~~WASHINGTON 25, D. C.~~

August 6, 1948.

Memorandum

To: The Director, Geological Survey.
From: Chief, Water Resources Branch, National Park Service.
Subject: Record of Well, Montezuma Castle National Monument.

We enclose a record of the well drilled at the headquarters area of Montezuma Castle National Monument in 1928, which has been prepared in recent consultation with the man who drilled it. It is incomplete because no log was kept.

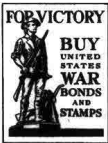
The record also lacks data on the yield. The Custodian reports that the pump installation is not adequate for a proper pump test. We will give the matter further consideration when our hydraulic engineer visits the area, presumably next winter.

(SGD.) A. VAN V. DUNN

AvVD:sh.

Chief, Water Resources Branch.

Enclosure 267.



UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

ADDRESS ONLY
THE DIRECTOR, NATIONAL PARK SERVICE

CHICAGO, ILLINOIS
~~XXXXXXXXXXXX~~
Washington 25, D. C.

August 6, 1948.

MEMORANDUM for the Regional Director, Region Three.

We enclose copies of the Record of the existing well at the headquarters area of Montezuma Castle National Monument, Mr. Wirth's memorandum of April 30, the reply of June 4 from Mr. Hastings, and Mr. Lasciter's memorandum of June 8, all in duplicate. These should be inserted in the assemblies of Deed 3, in your office and at the Monument.

As pointed out in my memorandum of April 30, this Record will appreciably alter the status of the water claim under Permit A-1964. However, we do not have to take further action until 1951. In the interim, I expect to visit the area, and will decide what can be done to clarify the matter.

(SGD.) A. VAN V. DUNN

Chief, Water Resources Branch.

AvVD:sh.
Enclosure 264.
In duplicate.



(2)

UNITED STATES
DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE
WASHINGTON 25, D. C.

ADDRESS ONLY
THE DIRECTOR, NATIONAL PARK SERVICE

July 20, 1948.

MEMORANDUM for the Regional Director, Region Three.

We assume that you expect Special Use Permit I-33np-35, to authorize Mrs. Ada T. Jackson to obtain water from the Federal water system at Montezuma Castle National Monument during 1948, to be the last to be issued to the permittee. We assume that the land use permit for Mrs. Jackson will be terminated at the close of this year in accordance with our letter of July 20 to her. We concur in the approvals on that basis.

If it should be necessary, or desirable, to renew these permits for another year, the following changes will be required:

1. The two permits for land and water use should be combined or cross-referenced.
2. The area of use and the water systems should be more specifically defined so that it will be clear that the use is adjacent to the headquarters area on the old Monument area, and not on the Montezuma Well area which has been added since the first permits were issued.
3. The fee for water use might be reconsidered, and possibly raised to make it equal to the cost of delivery.

(SGD) A. E. DEMARAY
Acting Director.

AvVD:sh.

In duplicate.

cc: Mr. Gerner.
Mr. Dunn.✓

C O P Y

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
REGION THREE
SANTA FE, NEW MEXICO

June 8, 1948.

MEMORANDUM for the Director.

There is enclosed copy of Custodian Hastings' memorandum of June 4, relating to the water well which serves Montezuma Castle National Monument. This memorandum is in reply to Mr. Wirth's memorandum of April 30, asking for verification of certain questions relating to water right deed pertaining to this well. It is hoped that Mr. Hastings' explanation of the points in conflict will enable Mr. Dunn to complete his records on this well.

(Sgd) J. R. Lassiter

J. R. Lassiter,
Regional Engineer.

In duplicate.
Enclosure 2866028.
cc: Cust., Montezuma Castle.

C O P Y

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

Montezuma Castle National Monument
Camp Verde, Arizona

June 4, 1948.

MEMORANDUM for the Regional Director, Region Three.

Reference is made to Regional Engineer Lassiter's memorandum of May 5, 1948 regarding wells and water rights for this monument. We regret reply has been delayed so long because of the heavy visitor travel which leaves little time for administrative matters. It is only taking time on a day off duty that I am able to prepare this reply.

The following refers to questions raised by Mr. Wirth in his memorandum of April 30 and transmitted with Mr. Lassiter's memorandum of May 5. The record appears to be understood regarding the well drilled at Montezuma Well in 1947. This is covered in Deed 7 and was transmitted to us with Mr. A. van V. Dunn's memorandum of April 15, 1948.

At Montezuma Castle we have an existing well and a proposed well. The existing well is located within three feet of the south end of our present museum building which before 1939 was the Custodian's residence. The well is about 125 feet from the north bank of Beaver Creek and is sheltered by a pump house attached to the end of the museum building. My information on this well is as reported in my memorandum of April 14 which referred to Mr. Lassiter's memorandum of January 16. It is based on information obtained orally from the driller and from the replies to a memorandum of May 1, 1937 written by former custodian Earl Jackson to his father.

The questions raised by Mr. Wirth are discussed in the order in which they are presented in his memorandum of April 30.

1. The well is 88 feet deep. The Application may have been based on the assumption that water would be struck about 24 feet below the surface which is about the distance to the usual water level in Beaver Creek.
2. The casing of the well where it can be seen is 6" in diameter. I do not know why the Application shows a diameter of 12".
3. It may have been presumed that our well would draw on the underground flow of Beaver Creek as indicated in (1) above.

4. This question must refer to Item 12, Yield, in the Record. We reported the natural flow as "None" meaning there was no artesian flow. We have no way of learning how many gallons of water per minute this well will yield. The pump is mounted over the casing in such a fashion that to examine the well, the pump would have to be disconnected by someone equipped to do well servicing and the whole water system disrupted at a season of heavy travel.

The location of the pump and its connection to a pneumatic pressure system makes it impossible for us to make any observations on the yield of this well. We have no way of checking the rate at which water is now pumped and the lowering of the water surface in the well.

We presume there is no confusion between the existing well discussed above and the proposed well to be drilled about an eighth of a mile to the southeast and up Beaver Creek. This is covered in PCP Sheet U-1-1, January 22, 1942. Our latest Priority Sheet showed the Index Number as U-1-2 for this item.

In duplicate.

Homer F. Hastings,
Custodian.



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

ADDRESS ONLY
THE DIRECTOR, NATIONAL PARK SERVICE

April 30, 1948.

MEMORANDUM for the Regional Director, Region Three.

The Record of Well, drilled at Montezuma Castle National Monument in 1928, which was forwarded in duplicate with the memorandum of April 23 from Mr. Lassiter, is assumed to pertain to the existing well described in Deed 3 for that area. Verification is desired because the data conflict with those in the water right deed as follows:

1. The Record gives a depth of 88 feet, but the Application gives a depth of 24 feet.
2. The Record gives a diameter of 6", but the Application gives a diameter of 12".
3. The Record indicates that water was encountered at a depth of 48 feet, after penetrating 30 feet of limestone rock formation, while the Application is based on diversion of underground flow of Beaver Creek.
4. The Record indicates that no water is now used (or do you mean that there is no artesian overflow), although it is said to be used for domestic purposes, while the Application indicates that it is the sole source of supply until the proposed well can be drilled about an eighth of a mile to the southeast.

It is extremely fortunate that Mr. Hastings was able to obtain this ancient history from the well driller, if both reports relate to the same well. The information will change the status of water rights appreciably, and will also have considerable bearing on the design for the new well.

It is now particularly important to determine the capacity of the present well. The Water Right Application indicates that the present pump has a capacity of 20 gallons per minute. Tests should be made with this pump to determine whether that quantity of water can be pumped for any appreciable time without lowering the water

surface in the well; or how far the water surface can be lowered in various time intervals, and how long it takes the water to return to the original level after pumping is stopped. If the pump will do it, we should also determine the time needed to pump the well dry; or to a static water level, what that static level is, and the time for refill after pumping.

We note that you have sent us two carbon copies of the Record of Well. We assume that you have retained the original and one copy for the deed assemblies in your office and at the Monument. We still need one extra copy, which we will type. However, in the future, please send us the original so that we can get better photostats if needed. Also, in accordance with Mr. Dunn's memorandum of March 23, we suggest that only one carbon copy be made, and retained by the composer, until we determine how many extra copies will be needed in the particular case.

(SCD) CONRAD L. WIRTH

Acting Assistant Director.

AvVD:sh.

In duplicate.

cc: Mr. Dunn .

James H. ...
File Copy
Branch of Plans and Design

UNITED STATES
DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE
Region Three
Santa Fe, New Mexico

April 23, 1948.

MEMORANDUM for the Director.

There are enclosed two "Record of Well" forms filled out by Mr. Hastings for the Montezuma Castle National Monument well, drilled in 1928. Mr. Hastings states - "I have at last been able to contact the man who drilled the well at Montezuma Castle. The well was drilled twenty years ago and no log is available but the Record of Well forms have been filled in as best we can and are being submitted herewith."

*Well Records retained
by Water Resources Branch
for data assemblies and
for sending to Geological
Survey. *AD**

J. R. Lassiter
J. R. Lassiter,
Regional Engineer.

Enclosure 2954603.
In duplicate.

Lasita

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
~~CHICAGO, ILLINOIS~~
Washington 25, D. C.

ADDRESS ONLY
THE DIRECTOR, NATIONAL PARK SERVICE

January 12, 1948.

Mr. O. C. Williams,
State Land Commissioner,
Phoenix, Arizona.

My dear Mr. Williams:

The enclosed Notice of Beginning of Construction of the water system at Montezuma Castle National Monument under Permit A-1964 is offered as a matter of record rather than news. The water system has been in operation since before the application was filed. Its completion, by enlargement, is dependent on increasing water demand created by similarly increasing annual visitor attendance at the Monument, subject, however, to the restoration of a stable postwar Federal economy. We can now only hope that we shall be able to catch up with the postwar water demand by the date construction should be completed under the permit, and do not know how the public will be accommodated if we do not.

(SGD.) A. VAN V. CUMMINS

Chief, Water Resources Branch.

Enclosure 693.

cc: Regional Director, Region Three (2).



March 26, 1946

Messrs Burney and Rickey

Dunn

Boundary Changes- Montezuma Castle National Mon.

We obtain the water for the monument from the underground flow of Beaver Creek by wells. The closer wells are together, the slower the possible rate of refill.

The present wells are shallow, but there is no assurance that deeper ones will not be wanted later. A deeper well might drain water from the whole valley, including both sides of the surface stream.

For these reasons, I think the boundary should be the top of the cliff line on both sides of Beaver Creek to prevent close neighboring developments, and to prevent as much potential pollution of valley surface as possible. I also think we should take in more of the valley, up stream.

Therefore, I agree with Mr Rickey, plus, and not with Mr Tillotson.

(SGD.) A. VAN V. DUNN
Chief, Water Rights Division

54

October 1, 1945.

Mr. Samuel P. Turner,
District Engineer,
Geological Survey,
408 N. Fourth Avenue,
Tucson, Arizona.

My dear Mr. Turner:

Reference is made to your letter of September 19 concerning our water right problem in connection with the use of the underground waters of Beaver Creek at Montezuma Castle National Monument, Arizona.

We appreciate the information on the revision of the underground water laws of the State of Arizona. It may be that the law will be passed soon enough to eliminate any need for your assistance. However, if you have a man in the area for other reasons at any time he might be able to provide the assistance necessary to complete the water right.

We have a shallow well located within a relatively few feet of the shore of Beaver Creek and have every reason to believe that the water obtained from the well is merely the underground flow of Beaver Creek and subject to appropriation. There are other appropriators of water above the Monument, who have been considering making more extensive diversions, and it is therefore to our advantage to establish as early a priority for our water claim as possible. However, the former State Water Commissioner refused to grant a permit on the basis of our application unless we proved by fluorescein tests or otherwise to his satisfaction that we were in fact diverting underground stream flow, and not percolating waters. Our application has been assigned number A-1744 with a potential priority of March 9, 1937, but no permit has been granted because of our failure to provide adequate proof. Since that date, the well has been used without permit. We have two potential methods of proving the identity of the water, one being to apply enough fluorescein to the stream above the diversion to obtain a positive reading from samples from the well, and the other to wait until such time as higher appropriators divert enough water to have an evident effect on the water level in the well. The latter will be quite difficult because of our limited records of the natural flow of Beaver Creek, and of the seasonal fluctuation of the water level in the well.

Should your representative be in the area at any time soon, it would be appreciated if he could review the situation and give us his opinion as to the best method of proving the source of the well water. Perhaps he could determine whether the use of fluorescein looks hopeful enough to justify the time and expense of such procedure prior to the passage of the underground water law.

Sincerely yours,

cc:Regional Director, Region Three (2),
with 2 copies each of Mr. Burney's (SGD) A. W. BURNLEY
memo of Aug. 11 to Geological Survey,
Mr. Wrather's letter of Sept. 4 to A. W. Burney,
Mr. Burney, and Mr. Turner's letter Chief Engineer.
of Sept. 19 to the Director.

Mr. Dunn.

C O P Y

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

408 N. Fourth Avenue
Tucson, Arizona

September 19, 1945

The Director
National Park Service
Chicago 54, Illinois

Dear Sir:

In further reply to the memorandum of A. W. Burney, Chief Engineer, addressed to the Director of the U. S. Geological Survey:

A special session of the Arizona Legislature is now considering a ground-water law. It is very doubtful whether a law will be passed this session, but it probably will be passed within the next year or so. Such a law would allow the adjudication and determination of the rights to the underground flow of Beaver Creek.

If you could give us more information regarding the problem, it is possible that one of our geologists might be able to visit the Montezuma Castle National Monument and determine further facts regarding the type of work necessary. Since our cooperation in the State of Arizona is with the State Land Commissioner, who now has charge of the Water Department, we would also be glad to discuss the matter with him.

Very truly yours,

(Sgd) Samuel F. Turner

Samuel F. Turner
District Engineer-GW

C O P Y

August 11, 1945.

MEMORANDUM for the Director,
Geological Survey,

Reference is made to the memorandum of July 10 from Mr. C. G. Paulsen, Acting Chief Hydraulic Engineer, to Associate Director A. E. Demaray of this Service, with regard to possible assistance which the Geological Survey might render in connection with our water rights problems.

The Water Rights Division is probably making far more use of the Survey than is indicated by correspondence. Until a year ago, A. van V. Dunn, Chief of our Water Rights Division, was stationed in San Francisco and made frequent calls on Mr. McGlashan, both for interviews and to consult the records. Since his transfer to Chicago, it happens that the majority of his work has involved legal phases of water rights rather than quantitative matters, but that is a transitory situation.

At Montezuma Castle National Monument, in Arizona, we have one claim for the diversion of what we believe to be the underground flow of Beaver Creek, which the Water Commissioner of that state has held in abeyance until we can prove the source of the supply. As Mr. Paulsen doubtless knows, percolating water in that state is not subject to appropriation in accordance with the surface water laws. Apparently we should either try a fluorescein test, or wait until those farther upstream make such large surface diversions that they affect the water table or draw-down in our wells. The matter does not require immediate attention, but the fluorescein test would probably be the type of problem which could be made best by some one from your Albuquerque laboratory. We shall be pleased to have your comments or suggestions.

Chief Engineer.

cc: Mr. Demaray.

Montezuma Castle 660-05.7
X Mesa Verde 660-05.7
X Lehman Caves 660-05.7

**WATER RIGHTS SECTION
601 Sheldon Building
San Francisco 9, California**

March 29, 1944.

MEMORANDUM for the Director.

We enclose forms I-1 and I-3 covering water right deeds as follows:

1. I-1 for Lehman Caves Deed 2 covering decreed right under Preof No. 01065 for 0.15 sec. ft. from Cave Spring. (The deed assembly is being held here pending approval of the amendment by the State Engineer. Such approval is dependent on an abstract of the chain of title from Mr. Rhodes to the National Park Service through the county and Forest Service.)
2. I-3 for Montezuma Castle Deed 3 covering National Park Service water claims at that monument. (The deed number is assigned because the priority is established. Form I-3 is used instead of I-1 because final title has not yet been defined as riparian or established by appropriative permit and license.)
3. I-1 for Mesa Verde Deed 4 covering the water right filing No. 16898 as now being adjudicated. (This claim has the same status as a filing with permit but no license, but it is weaker in that we are supposed to prove progress in court in 1945 and extensions of time are not always so easy to obtain in court as under the permit system. It is hoped that some material progress can be made this summer.)

AvVD:sh

A. van V. Dunn,
Hydraulic Engineer.

Enclosure 405.

cc: Region Three, with copies of forms
for Region Three and for areas.

FILE COPY

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
REGION THREE
SANTA FE, NEW MEXICO



February 9, 1944

MEMORANDUM for the Custodian,
Montezuma Castle National Monument

We are enclosing a copy of Mr. Dunn's memorandum of February 2 regarding water right problems at Montezuma Castle National Monument.

Since you have a closed automatic pressure water system, we see no practical way to work out Mr. Dunn's suggestion.

It is suggested that you keep a check on any water development made for the "Davis Property", and attempt to determine if it effects the flow of our well. If we could prove that diversion from the stream changes the water level and quantity of water in the well, we have a case; otherwise, there is not much we can do at this time. It appears doubtful that a diversion from the creek will have any effect on the well.

CHARLES A. RICHEY
Charles A. Richey
Assistant Regional Director

cc: Mr. A. Van V. Dunn ✓
Director

C O P Y

October 29, 1937.

Mr. Frank Pinkley,
Superintendent,
Southwestern Monuments,
Coolidge, Arizona.

Dear Mr. Pinkley:

This refers to your letter of October 18 with which you enclosed a copy of a letter from the State Water Commissioner Jesse C. Wanslee under date of October 11.

Inasmuch as the State Water Commissioner has received our application, at least to the extent of filing it, and since he acknowledges that the filing establishes the date of priority as of March 9, 1937, it seems to us that our position has been protected.

We recommend that the matter be allowed to rest in status quo if possible. I do not see how we can furnish any further proof, but it is possible that Mr. Dunn will again be in the vicinity of this monument during the winter, and he may have further suggestions after viewing the ground personally.

At this time we would also like to acknowledge receipt of your letter of October 12 concerning your application for a permit to appropriate water at Chiricahua National Monument. We note that payment of the permit fee has been acknowledged and that you are tracing the matter and will advise of any further information upon the subject.

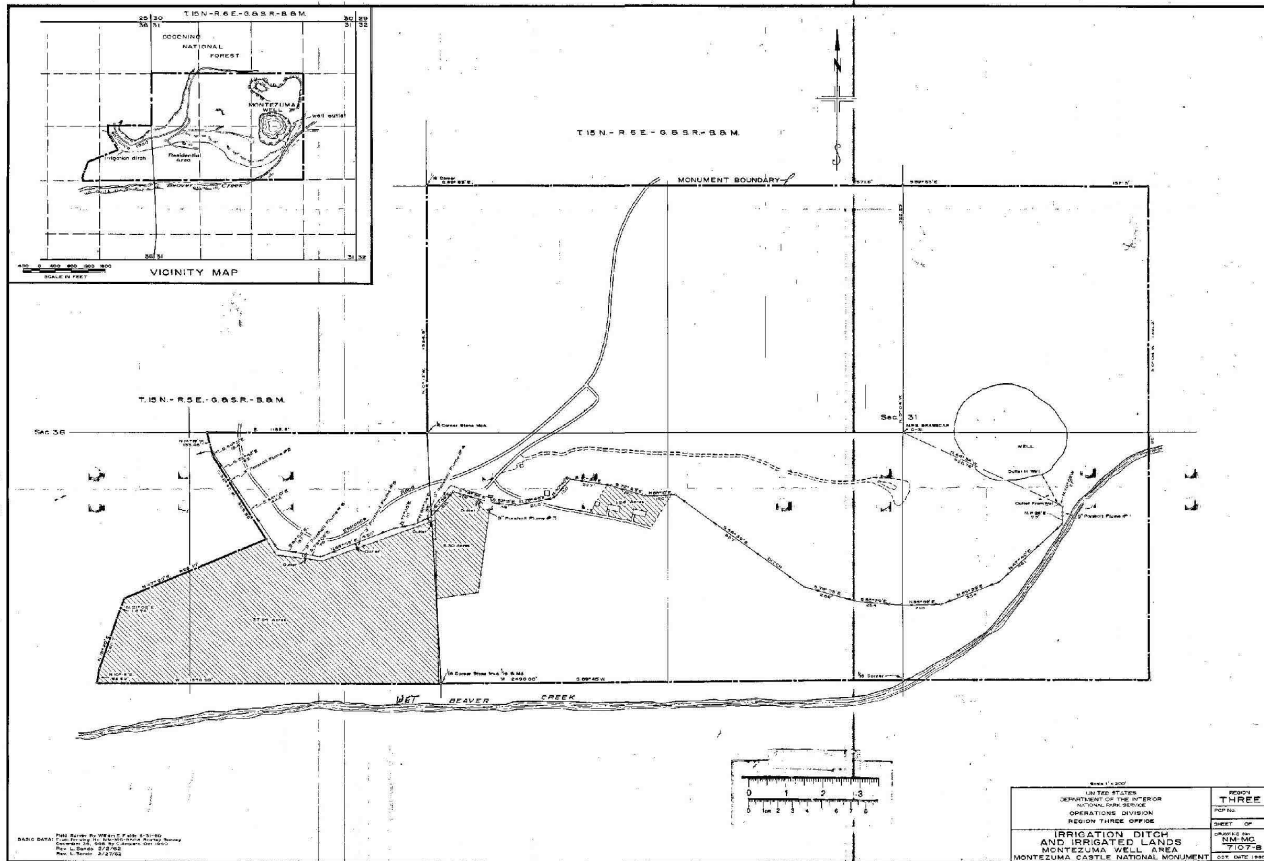
Sincerely yours,

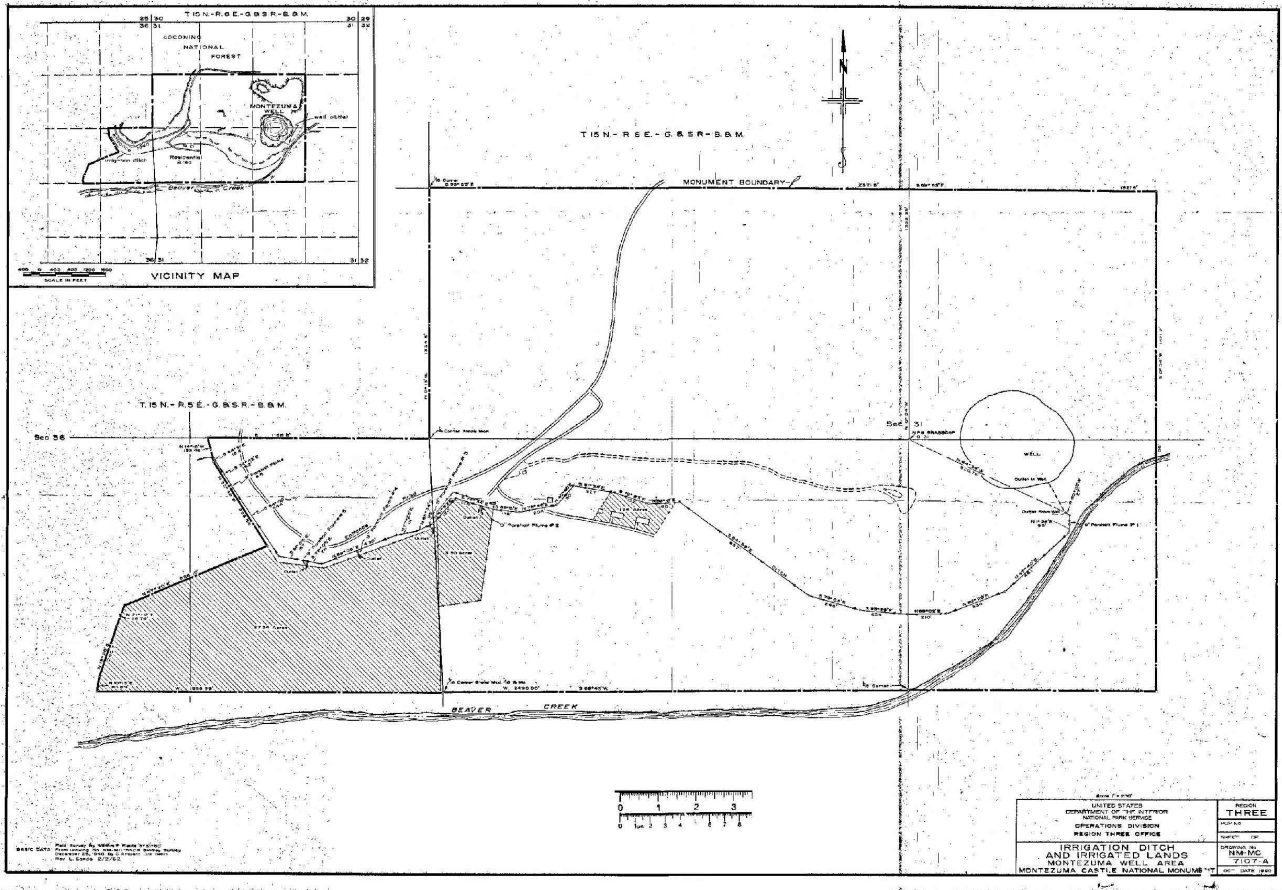
Joseph E. Taylor,
Regional Attorney.

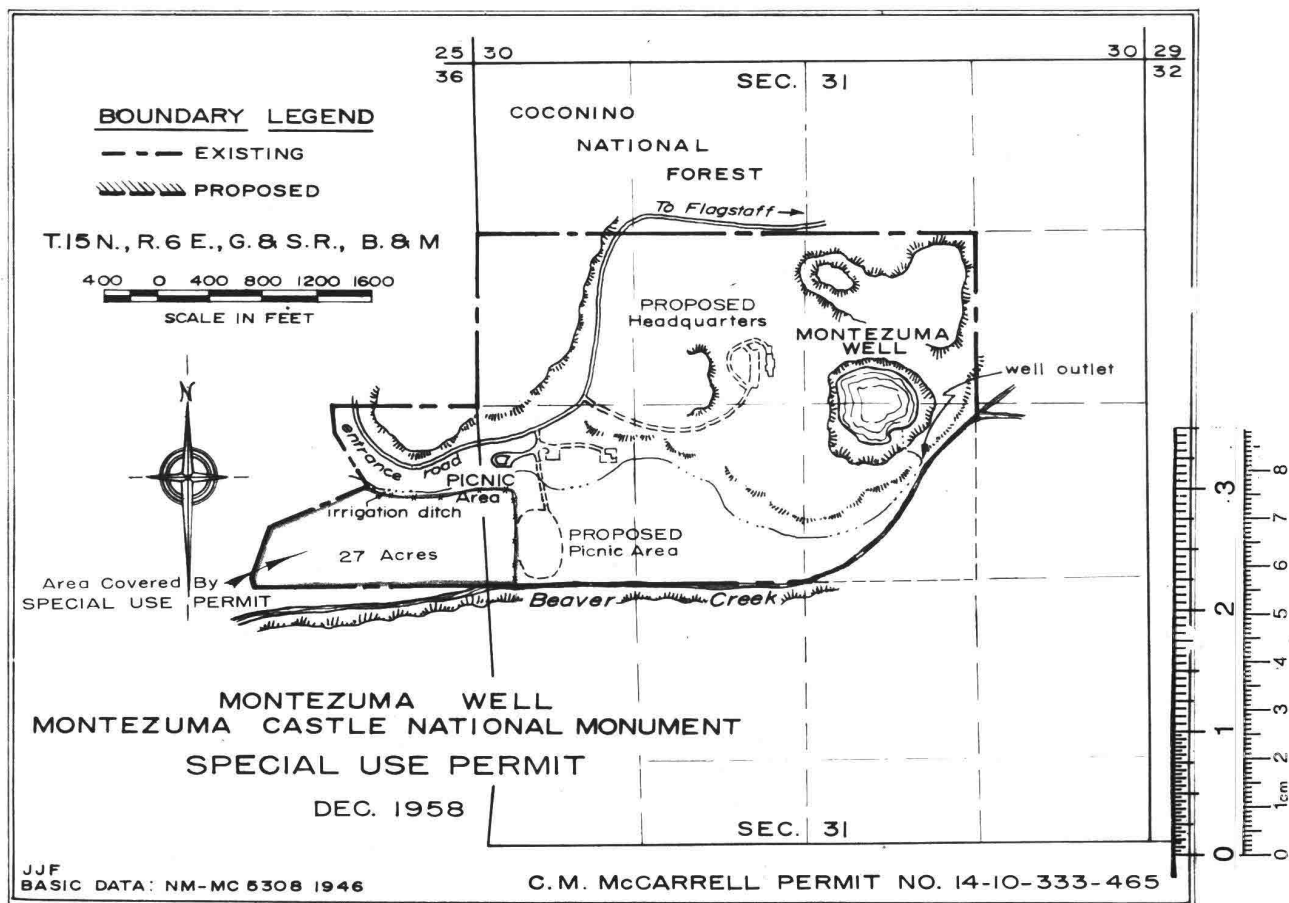
In duplicate.

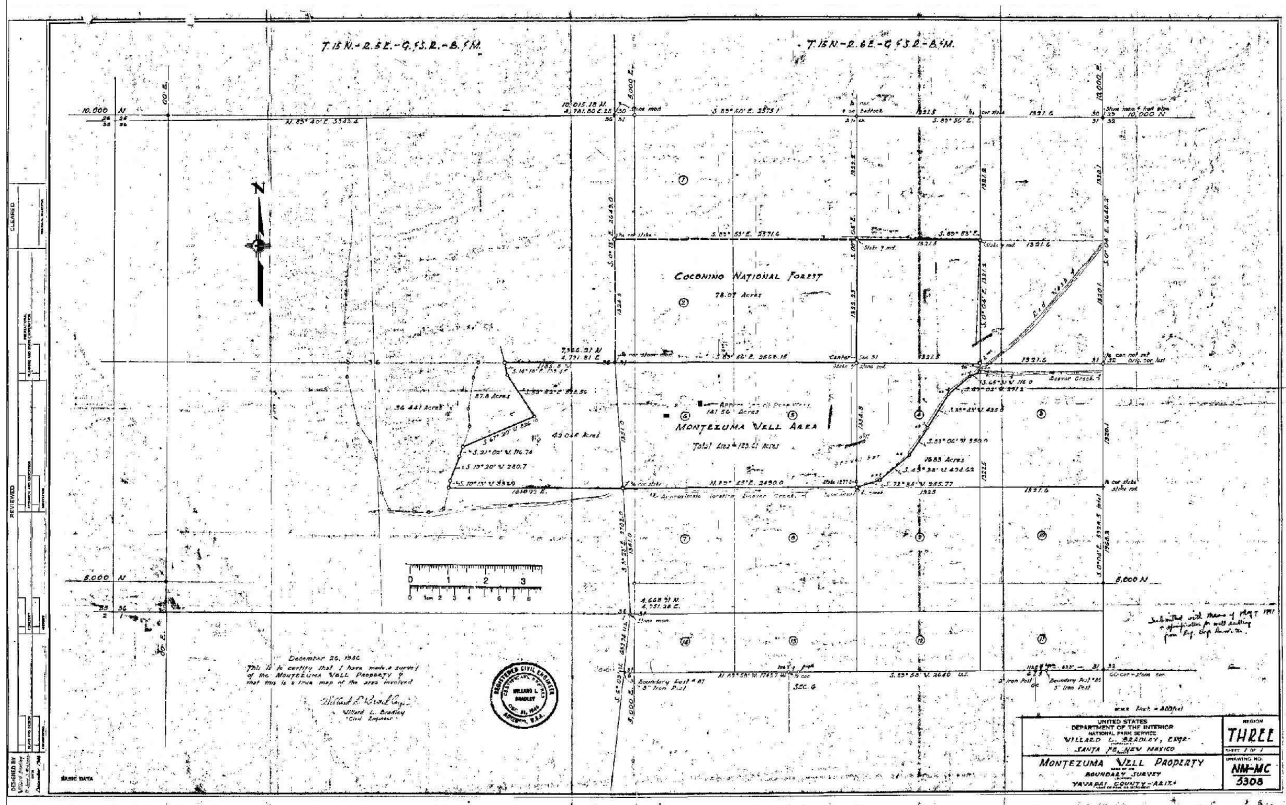
CC: Director.
Regional Director, Region 3.

Maps and Miscellaneous Information









Docket Information

Number of Documents in Docket 84

Documents Dated from 10/29/1937 to 6/9/1982

Docket Compiled: 5/26/2011