



WATER-RIGHT DOCKET

Tonto National Monument

Docket No: 3

HEADQUARTERS WELL

Preliminary Docket Information

05-21-1979: docket information sheet

DOCKET (FILE) TITLE _____		DATE: May 21, 1979
REGION Western	AREA Tonto National Monument	
SITE Headquarters Well		
STATE Arizona	COUNTY Gila	DOCKET NO. WR #3
LOCATION SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 34, T4N, R 12E		
REGIONAL BASIN Colorado	LOCAL BASIN _____	
ACQUIRED BY Reservation		
APPLICATION _____	PERMIT _____	CERTIFICATE _____
ACTION DUE _____	PRIORITY _____	RESERVATION December 19, 1907
QUANTITY USED: 7.5 gpm	USE Domestic and public supply	
STATUS Active	SOURCE Groundwater	
REMARKS See "Grazing and Water Rights" at Tonto National Monument dated April 1975. Located in Hydrologic Basin Unit #15060103.		
NARRATIVE: On February 12, 1962, the Assistant Regional Director of Region Three, NPS, wrote to Mr. Eldon Dennis, District Geologist of USGS, regarding the water system at Tonto National Monument. At that time, the sole water source was a spring (Cholla No. 1) which had up to that time been adequate but which would not be sufficient in the foreseeable future. The NPS made a formal request for a ground water study to be made at Tonto N.M. with the intention of drilling a well with the capability of producing 10 to 15 gallons per minute. Mr. Dennis and J. Akers, both of USGS, made a survey on March 12, 1962, and recommended drilling an exploratory well at the site of Cholla spring No. 2. Drilling commenced on January 14, 1963, and was completed to a depth of 145 feet. This well, designated the Headquarters Well, then supplied the residences within the Monument, the visitor center, and for three years, the Cooper stockwatering trough.		
Location: SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 34 T4N R12E 5/9/80 WBR		
Compiled by _____		
Approved by _____		

Station	Water System	Type of Source	Legal Source
Active	<u>B</u>	L R S <u>N</u>	S <u>G</u>
Inactive	S	Like River Spring Well	Surface Water Ground Water

	Priority	year	month	day	Quantity Yested	cub.ft.	gal	acre ft.	miles ³ in.	per	see min	day	month	year	
	8	6	3	0	7	1	4				1	2	3	4	5

Quantity Used	1	2	3	4	5
cu.ft., gal acre ft., miner's in.	1	2	3	4	5
per sec min day month year	1	2	3	4	5

(13)		Other
(09)		Recreation
(10)		Mining
(11)		Power
(12)		Fire Protection
(08)		Municipal
(07)		Public Supply
(06)		Domestic
(05)		Campground
(04)		Wildlife
(03)		Irrigation
(02)		Stockwater
(01)		None

Use of
Water [0] [6]
Primary [0] [7]
Secondary

Reservation Date	Date of Adjustment	Hydrologic Unit Number
year month day 9 0 7 1 2 1 9	year month day	1 5 0 6 0 1 0 3

Card #	4C
Add Change	
Remarks	SUPPLIES RESIDENCES \$ MISITORS GEN

[illegible][illegible][illegible]

TOUT WR # 3

NATIONAL PARK SERVICE
WATER RIGHTS DATA SHEETOrganization
Code 8680Docket
Classification F B A
Federal Reserved AlienDocket
Number 03

Source Number 01 of 01

Card #1 1A 1C
Add Change

Site

HEADQUARTERS WHEEL

Location

Township/Range --- T 4 N R 12 E Sec 34

A B C D
NAT SMT SEX of NAT SMT SEX of NAT SMT SEX

1 Lat/Long --- Latitude deg min sec N S Longitude deg min sec

2 Other ---

Card #2 2A 2C
Add ChangeSequence
Number 01

State 04

County 5124

Acquired by 1 2 3 4 5
Purchase Appropriation Riparian Reservation Other
(Explain in Remarks)Application
Number Date year month day CancellationPermit
Number Date year month day CancellationCertificate
Number Date year month day Cancellation

7. State all other sources of water supply not described in Question 6 of this form.

A. Type of Source: well - Headquarters Well

B. Location of Source (indicate on map): 1/4 1/4, Section 34
 Township 4 (N/S), Range 4 (E/W), Gila and Salt River Base and
 Meridian, County Gila. Ownership

C. If other source is well, list following:

(1) Date well construction began: Jan. 14, 1963; Date well placed in
 use: Feb. 4, 1963.
 (Month/Day/Year)

(2) Location (10 acre subdivision) (indicate on map): SW 1/4 SE 1/4
NE 1/4, Section 34, Township 4 (N/S), Range 12 (E/W),
 Gila and Salt River Base Meridian, County of Gila

(3) State Land Department Intent to Drill, File No. , or
 Application for Permit No.

(4) State whether free flowing or pump: pump. If pump, list
 type of pump and capacity: submersible - less than 35 gallons/min

(5) Casing depth 145.6 ft. Total well depth 145.6 ft. Diameter
 of casing 6.0 inches.

(6) Depth to water: 10.5 ft. (Static Level)

(7) Annual amount pumped, or otherwise extracted: 950,000 ~~xxx~~ Gallons

(8) State purpose of use: domestic

(9) Indicate annual period of use: Jan. 1 to Dec. 31.
 (Month/Day) (Month/Day)

7. State all other sources of water supply not described in Question 6 of this form.

A. Type of Source:

B. Location of Source (indicate on map): 1/4 1/4, Section
 Township (N/S), Range (E/W), Gila and Salt River Base and
 Meridian, County . Ownership

C. If other source is well, list following:

(1) Date well construction began: ; Date well placed in
 use: .
 (Month/Day/Year)

(2) Location (10 acre subdivision) (indicate on map): 1/4 1/4
1/4, Section , Township (N/S), Range (E/W),
 Gila and Salt River Base Meridian, County of

(3) State Land Department Intent to Drill, File No. , or
 Application for Permit No.

(4) State whether free flowing or pump: . If pump, list
 type of pump and capacity:

(5) Casing depth ft. Total well depth ft. Diameter
 of casing inches.

(6) Depth to water: ft. (Static Level)

(7) Annual amount pumped, or otherwise extracted: Ac.Ft./Gallons

(8) State purpose of use:

(9) Indicate annual period of use: to .
 (Month/Day) (Month/Day)

- (1) Year construction began: unknown
- (2) Year construction completed: unknown
- (3) Date water first stored: unknown (Month/Year).

If dam, list following:

- (1) Construction material: _____
- (2) Maximum Length: Top _____ ft.; Bottom _____ ft.
- (3) Maximum Width: Top _____ ft.; Bottom _____ ft.
- (4) Maximum Height: _____ ft.

If diverting works, describe: _____

distribution works:

If ditch or canal:

- (1) Date construction began: _____
(Month/Day/Year)
- Date construction completed: _____
(Month/Day/Year)
- (2) Length of ditch or canal to first place of use: _____ ft., total
length of ditch or canal: _____ ft.
- (3) Top width: _____ ft.; Bottom width: _____ ft.
- (4) Grade (slope) of ditch: _____
- (5) If ditch or canal owned and/or operated by an association or company or
such other entity, list name of association or company or such other
entity: _____

If pipeline:

- (1) Type: steel (i.e., aluminum, steel, etc.)
- (2) Diameter: 3/4 to 2 1/2 inches
- (3) Length of pipeline to first place of use: 1025 ft. and total length
of pipeline: 5500 ft.
- (4) Grade (slope) of pipeline: 7.3%

If other, describe: _____

enlargement(s) of storage reservoir and/or diverting and/or distributing works

Date begun: _____
(Month/Day/Year)

Date completed: _____
(Month/Day/Year)

Describe details of enlargement(s): _____

Dimensions of works as originally constructed and as enlarged: _____

Explanatory

Item 4. The National Park Service claims the entire flow from this source for the
indicated purposes. The volumetric flow from this source was 6.0 gpm on
Sept. 18, 1980. The estimated annual flow from this source is 2.5×10^5
gallons.

Item 6, part C. The source is used at the following locations: SW $\frac{1}{4}$, NW $\frac{1}{4}$, Sec. 35,
T4N, R12E for the irrigation of yards in the residential area; SE $\frac{1}{4}$, SW $\frac{1}{4}$,
Sec. 27, T4N, R12E for wildlife; SW $\frac{1}{4}$, NE $\frac{1}{4}$, Sec. 34, T4N, R12E for wildlife.
(continued on the next page)

Item 7. This spring (Cholla Spring #2) is not known to have produced since the
early 1960's and the prior volumetric flow is reported as low.

(if more space is required, attach separate sheet(s))

STATE OF ARIZONA)
County of _____) SS

VERIFICATION

(please print Claimant-Affiant's name)

(Claimant-Affiant representative's name)

being first duly sworn, deposes and says; That the affiant, or its duly authorized representative, possesses the knowledge and the authorization to execute this verification as to the correctness and truthfulness of the matters set forth in the "Statement of Claimant", except as to those matters alleged upon information and belief, and as to those matters believes them to be true and correct.

For Corporations, Partnerships,
Associations, etc. *

Claimant-affiant signature

Gerard S. Witucki
Claimant-affiant representative's
signature

Claimant-affiant signature

Gerard S. Witucki
Chief, Division of Water Resources

Attest:

Claimant-affiant representative's
signature

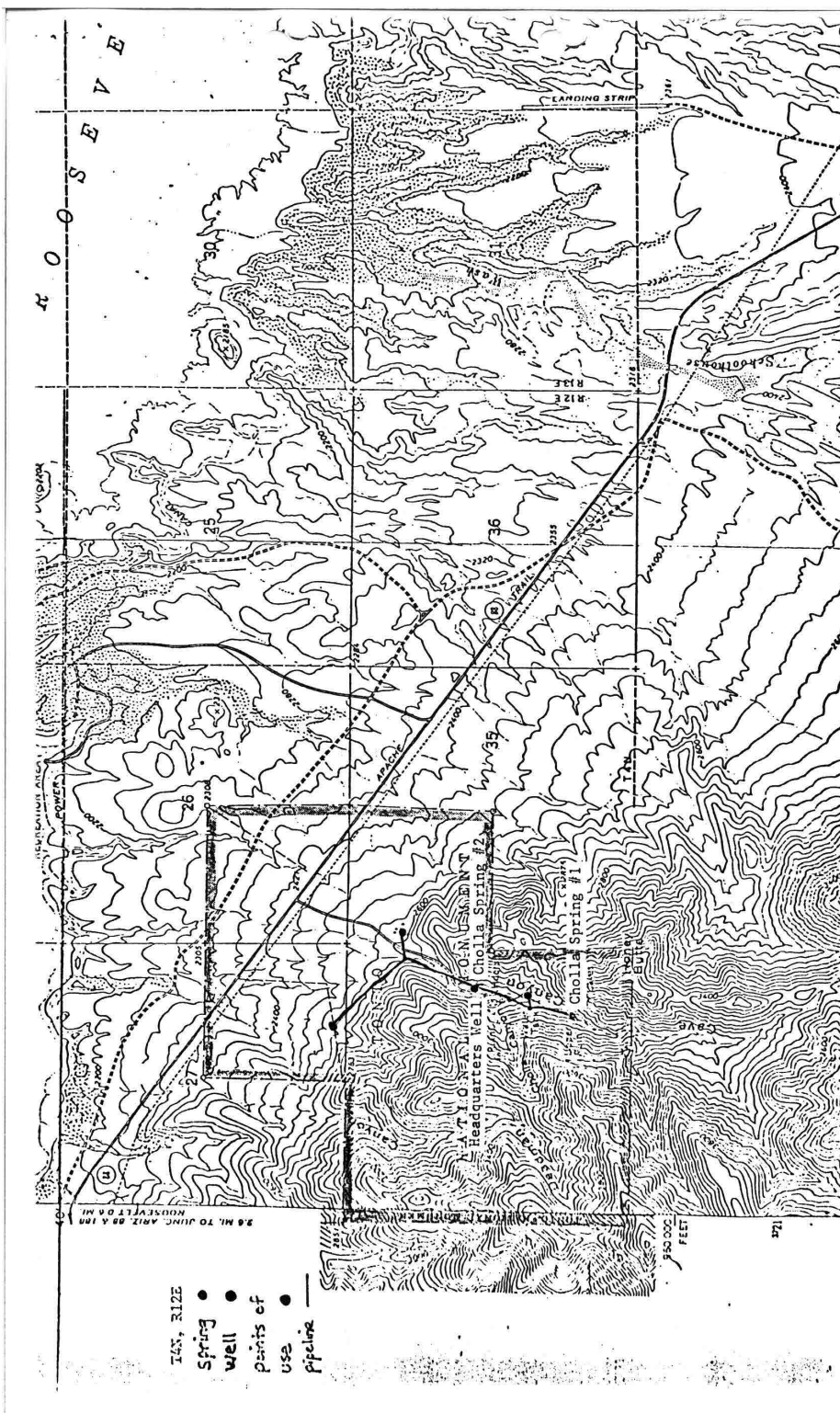
Subscribed and sworn to before me this
30th day of November, 1981.



Mary E. Meredith
Notary Public or authorized Employee of
the Arizona Water Commission

* United States Government
Department of the Interior
National Park Service
Western Regional Office

My Commission expires 3/26/85



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

REGISTRATION OF EXISTING WELLS

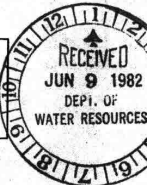
READ INSTRUCTIONS ON BACK OF THIS FORM BEFORE COMPLETING
PRINT OR TYPE - FILE IN DUPLICATE

Declaration: The United States gives 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- 629108

FILE NO. A(4-12)34adc

FILED 6-9-82 (DATE) AT 1:30 (TIME)

INA _____

AMA _____

1. 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)

2. File and/or Control Number under previous groundwater law:

35-

(File Number) (Control Number)

3. a. The well is located within the SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$, Section 34,
of Township 4 N N/S, Range 12 E E/W, G & SRB & M, in the
County of Gila.

b. If in a subdivision: Name of subdivision _____,
Lot No. _____, Address _____.

4. The principal use(s) of water (Examples: irrigation - stockwater - domestic - municipal - industrial)
public supply, domestic, fire protection

5. If for irrigation use, number of acres irrigated from well _____.

6. Owner of land on which well is located. If same as Item 1, check this box ☒

(Address) (City) (State) (Zip)

7. Well data (If data not available, write N/A)

- a. Depth of Well 140 (original depth 145) feet
- b. Diameter of casing 6 inches
- c. Depth of casing 145 feet
- d. Type of casing steel, perforated from 25 - 145 ft. below land surface datum
- e. Maximum pump capacity not more than 35 gallons per minute.
- f. Depth to water 10.5 feet below land surface.
- g. Date well completed February 4, 1963
(Month) (Day) (Year)

8. The place(s) of use of water. If same as Item 3, check this box ☐

SW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$, Section 35 Township 4 N Range 12 E

NW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$, Section 34 Township 4 N Range 12 E

Tonto National Monument

Attach additional sheet if necessary.

9. 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 629108

I request the following information be changed in Well File Number A(4-12)34 adc

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.

Geological Survey
Experimental (1966)

UNITED STATES DEPARTMENT OF THE INTERIOR

Water Resources Division

State ARIZ. County GILALocal well No. 4.12.34 Owner NPSNE 1/4 sec. 34 T 41 N 2 E R 36 E
HEADQUARTERS WELL

WB (see over)

Appearance We _____ Wa _____

Lab. No. 61514Collected by J.N. ROWLANDLab. Anal. A-1
As Fe 5.72Project No. NPSLatitude 34 N, 5 S
Longitude 10 W, 11 ESeq. No. 18
Date 04/25/67D Y
coll. 20Sampling depth 26 Type c

K x 106	23.7	35.1	R	KCl	435	807	80.7
pH	7.4	7.4	36	38	Temperature °F	31	35
SiO ₂	f. 51.6	1.0	m	27	27.1	39	41
Abs.	524					42	44
Ca	1.92	1.0	m	96	9.6	47	49
1.92						47	49
Mg			m	37	3.7	50	53
Subtotal cations (Ca, Mg, Na, K)					7.80		
Na	0.50		m	26	2.6	54	58
26	57.3				1.13		
K	0.10		m	1.8	0.05	59	61
17.5					8.98		
Subtotal cations (Ca, Mg, Na, K)					8.98		
HCO ₃	34.40	5.0	m	428	42.8	62	65
13.00					7.01		
21.40							
CO ₂	5.0	0	m	0	0.00	66	67
SO ₄	1.3	1.0	m	34	3.4	68	72
1.3					0.71		
Cl	2.5	0.42	m	42	4.2	73	78
2.5							
Mg. AgNO ₃	0.5	0.2	m	0.3	0.3	26	28
0.5					0.02		
Source of data	79	Card	Q	80	Q		
F	1.0	0.37	m	0.3	0.3	28	32
1.0					0.01		
NO ₃	1.0	0.37	m	0.3	0.3	28	32
1.0					0.01		
PO ₄							
Abs.							
HPO ₄							
H ₂ PO ₄							
Total anions					8.93		
A	1.31	1.0	m	0.08	0.08	36	38
1.31							
Al							
Abs (Al + Fe)							
Remarks and explanation on other side							
Fe	1.72	2.5	m	0.26	0.26	42	45
1.72							
Total							
Dissol.							
Mn							
Total							
Dissol.							
Cu							
Pb							
Zn							
Subtotal cations (Al, Fe, Mn, Cu, Pb, Zn)							
Subtotal cations (Ca, Mg, Na, K)							
Total cations							
Dissolved solids							
Residue at 180°	100	471	m	471	471	58	
100							
Dish No. X-24	545300						
545300							
Calculated	544829						
544829							
Hardness							
Ca, Mg	25	390	m	390	390	70	
25							
Noncarbonate	8.75	40	m	40	40	74	
8.75							
Color	3	3	Card	R			
3							

Recreational records, subject to revision

161514		State	County	Lat.	Long.	Seq. No.	Date	Samp. depth
Remarks: R.D. 2/8/63 DEPTH 145' WAF - GILIA CONGLOMERATE AND DRIPPING SPRINGS QUARTZITE USE: DOM, RARE SUPPLY OWNER: NPS Box 707 ROOSEVELT, ARIZONA 85545								
B	_____ ml	26	28					
I	_____ ml	29	31					
Alk. as CaCO ₃	32	35						
Free CO ₂	36	38						
SAR	39	41						
RSC	42	44						
Organics								
MBAS (ABS)	45	47						
	48	50						
	51	54						
a Master card A (21-34) b Master card A (52-66) c Type: 1. Pumped 2. Bucket 3. Forest 4. Sprigot 5. Bailor 6. Special d Source of data: 1. USGS 2. UPHS 3. State Health 4. State 5. Industrial 6. Private 7. National								
Radiochemical Alpha (pc/l) 55 Beta (pc/l) 58 Ra (pc/l) 61 U (ug/l) 64 Other data (67-79) ^e								
Provisional records, subject to revision. e Indicate constituent and card column. Card 5								
Chemist: WILLIAM L. LEPP Checked by: E. F. WILLIAMS Date began: 2/1/63 Date transmitted: _____ Punched by: _____ Verified: _____								

Conto 1

G.W. Type Analysis A-1 U.S. GEOLOGICAL SURVEY ANALYTICAL NOTES Project NPS Collector J.N. Rowland
 State Arizona County Gila City (at or near) Tonto National Monument Headquarters NE 1/4 NE 1/4 Sec 34 T 4 N R 12 E
 Latitude-Longitude _____ Well No. 4-12-34 Date Collected April 22, 1965
 Owner U.S. N.P.S. Tonto National Monument, Roosevelt, Ariz Date Drilled Jan 14, 1963 Cased to _____ Depth (ft) 145 Diam. (in) _____

pH 7.6 Temp 75
 Hardness as CaCO₃ 382
 Total 382
 Noncarbonate 19
 Color 3 S.A.R. 0.6
 %Na 13 T/Al 0.62
 Density (g/ml) _____
 W.B.F. Diabase alluvial gravel
 Producing Intervals 30'-35' to 65'-80'
 W.L. 7.64 ft static
 Sampled after Pumping (Time) 15 minutes
 Yield 7.5 gpm pump (meas.)
 Point of Collection Pump house
 Appearance Clear
 Use Dom. & Public Supply
 Remarks: Source: Drilled
 Chemist KO Checked By [Signature]
 Date Completed JUN 7 1965
 Date Transmitted _____
 Laboratory No. 67005

Spec. Cond. (micromhos at 25°C): T <u>235</u> R <u>348</u> Sample <u>446</u>		PPM	PPM	PPM	PPM
Silica	f <u>50.8</u> vol <u>10</u>	<u>26</u>			
Calcium	<u>456</u> EPM TH <u>91</u>	<u>91</u>	<u>5</u>		
Magnesium	<u>25</u> vol <u>25</u>	<u>38</u>	<u>3.10</u>		
Sodium	vol <u>50</u>	<u>26</u>	<u>1.13</u>		
Potassium	vol <u>50</u>	<u>1.8</u>	<u>0.05</u>		
Na+K (Calculated)					
Iron	f <u>1.92</u> vol <u>25</u>				
In sol.: o.d.					
Total: o.d.	<u>0.055</u>	<u>0.11</u>			
TOTAL CATIONS		<u>8.82</u>			
Bicarbonate	<u>22.15</u> PPM <u>443</u> EPM <u>7.26</u>				
Carbonate	vol <u>50</u> EPM TH <u>91</u>	<u>0</u>	<u>0.00</u>		
Sulfate	<u>1.34</u> vol <u>10</u>	<u>25</u>	<u>0.52</u>		
Chloride	<u>25</u> vol <u>25</u>	<u>32</u>	<u>0.90</u>		
Fluoride	vol <u>10</u>	<u>0.3</u>	<u>0.02</u>		
Nitrate	f <u>11.5</u> vol <u>10</u>	<u>0.8</u>	<u>0.01</u>		
Boron	f <u>1.61</u> vol <u>1</u>	<u>0.06</u>			
Sum of Constituents		<u>459</u>			
Residue on Evaporation at 180°C	vol <u>100</u>	<u>459</u>			
dish X-125					
TOTAL ANIONS		<u>8.71</u>			

Provisional records, subject to revision.

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

ANALYTICAL STATEMENT - GW COUNTY Gila ✓ 79783
NPS LAB NO. 52209

Location Tonto Nat'l. Monument, Roosevelt, Ariz. Date of collection July 19, 1963
SENE sec. 34 T4N R12E

Source (type of well) Drilled Ignition Loss Color 15 gpm ppm
Owner U. S. Nat'l. Park Service Dissolved Solids: 465 SiO₂ 23
Roosevelt, Ariz. 473 Fe 0.00
Date drid 2/8/63 Cased to ft Hardness as CaCO₃ 396 Fe(total) 6.8
Depth 145' Diam Non-carbonate Hardness 41 Ca 4.79 96
VSR * 1 No. 12 SAS 0.5 PH 7.3 Mg 3.13 38
Mach level 20' ft 85' Specific Conductance 801 Na 1.09 25
Sampled after pumping 5 min. (microhm at 25°C) Na + K 0.06 2.3
Yield 5 CPM (max) XXXX pump 9.07
Pt of coll At well *Brecciated quartz- HCO₃ 7.10 433
Appearance Colored ite and stream CO₃ 0.00 0
Temp (°F) 60 alluvium. SO₄ 0.73 35
Collector Henry L. Jones Producing intervals Cl 1.13 40
Chemist Kim Ong from 30-35 & 65 to F 0.02 0.3
Date completed Aug. 16, 1963 80. NO₃ 0.00 0.3
Checked by E. F. Williams 8.98 B 0.07
Date transmitted AUG 23 1963 Provisional records, subject to revision
4 copies NPS; 1 AGW

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

ANALYTICAL STATEMENT - GW

COUNTY **GILA**
LAB NO. **51322**

Location **Tonto Nat'l. Monument** Date of collection **Feb. 7, 1963**
West of Globe-30 mi. -
Ariz.

Drilled, cased
 Source (type of well)
 Owner **Nat'l. Park Service,**
Tonto, Ariz.

Date drid **Feb. 1963** Cased to _____ ft
 Depth **145'** Diam _____

Static **At 30' & 70-75'**
 Water level **drilled down to 3.5**
 Prod. intervals **fr. 30-35 to**
 Sampled after pumping **24 hrs 70-75 (Alluv)**

Yield **7** GPM (measured)
 Pt of coll. _____

Appearance **Clear apparently sed.**
 Temp (°F) **65** Joe Dom., Public Supply Tucson, Ariz.
 Collector **W.E. Fields, P.O. box 1728**
Santa Fe, N.M.

Chemist **Lewis J. Alary**
 Date completed **3/27/63**
 Checked by **E.F. Williams**
 Date transmitted **APR - 4 1963** 4-NPS
 T-AGW

Remarks: Send to
P. Eldon Dennis
USGS-Dist. Geologist

	epm	ppm
SiO ₂		27
Fe		
Total Fe		2.0
Ca	4.29	86
Mg	2.59	31
Na	1.09	2.5
K	0.08	3.3
Na+K	8.05	
HCO ₃	5.87	358
SO ₄	0.00	0
Cl	0.81	39
F	1.21	43
NO ₃	0.02	0.4
	0.01	0.9
	7.92	
		0.06

Provisional results, subject to rev.

Hand Carried Sample Analysis

Other Supporting Information



IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE

WESTERN REGION

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

JUN 9 '82

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 D. Cherry

Howard H. Chapman
Regional Director, Western Region

Enclosures

See attached sheet for bcc's

KMR

Rocky Mountain Regional Office	Initial & Date
Regional Director	<i>ML</i> <i>6/9/82</i>
Deputy Regional Director	
Administration	
Park Operations	<i>ML</i>
Plan & Resource Pres.	
Coop Prog	
Communications & P.A.	
EEI	
Oper Eval	
Action 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.

Tonto National Monument
Grazing and Water Rights

Tonto National Monument was proclaimed on December 19, 1907 and transferred from the Forest Service, U.S. Department of Agriculture, on August 10, 1933. In 1941, the Monument was able to obtain funds to begin a program of fencing the boundaries of the Monument, however, there was substantial opposition to this by the local cattlemen. It appears that two cattlemen in particular had been using Cholla Springs for stockwatering prior to 1933 when the area was turned over to the NPS. Grazing had been allowed to continue by the NPS because money had not been available for fencing until 1941. The Forest Service, at that time, was of the opinion that portions of the Monument had never been withdrawn from their jurisdiction and so were under the joint jurisdiction of the NPS and the USFS. The Forest Service had given Chester Cooper, under Allotment No. 66, a grazing permit covering most of Tonto National Monument and he used overflow water from Tonto Seep in connection with this allotment. The Forest Service had also given a grazing permit to a Mr. Neil Lyall (under Allotment No. 60) who also used water from Tonto Seep as 400 acres of the Lyall Allotment was within Tonto N.M.

As mentioned in Charles A. Richey's Report of Inspection, dated Nov. 25, 1941, Mr. Cooper objected to the proposed fencing by the Monument because of the loss of the water source. It appeared that Mr. Cooper suggested an alternate source for his cattle from a mesquite thicket in another area of the Monument.

On December 6, 1941, Mr. Cooper, Mr. Alexander (District Ranger of Tonto National Forest), and Charles A. Richey (Assistant Superintendent of Southwestern Monuments) entered into a tentative agreement under which Mr. Cooper would make no further objection to fencing the Monument providing that water was piped from the Tonto Seep to the boundary of the Monument for his use.

On July 17, 1942, the USFS entered into an agreement with the NPS regarding the issuance of permits for grazing within the boundaries of the Monument. "Since grazing was previously permitted by the USFS and grazing in the Monument area was difficult to control as it constituted in a large part overflow grazing from the adjacent forest areas", the USFS was to continue to issue permits for grazing in the unfenced boundaries of the Monument. This agreement was terminable at the end of any calendar year.

On December 4, 1942, Mr. Richey filed two applications with the State of Arizona to appropriate water within the Monument. The first, Application No. A-2601, was to appropriate from Cholla Spring (No. 1 Drain) 7,200 gallons per day for domestic use and 50,000 gallons per

annum for stockwatering. The second, Application No. A-2602, was to appropriate from a spring in Cholla Canyon, 2,500 gallons per day for domestic use and 365,000 gallons per annum for stockwatering. Diversion 1, Application No. A-2601, was to provide a supply for a public campground of about 100 person capacity. In both applications, paragraph 20 was supplemented with a statement that "Chester Cooper and Neil Lyall own adjacent grazing allotments No. 60 and 66 and use water under federal permits which reserve the right of the U.S. to complete the appropriation in accordance with this application."

The State on February 17, 1943 issued Permit No. A-1829 for Diversion 1 for 5,000 gpd for domestic use and 40,000 gpa for stockwatering and Permit No. A-1830 for Diversion 2 for 2,000 gpd for domestic use and 365,000 gpa for stockwatering. Notice of beginning of construction on both applications was filed by Richey on Feb. 12, 1944. Extensions of time within which to complete beneficial use were obtained as they became necessary subsequent to this date.

A drawing of the water system for the Monument, as constructed, (NM-TON-7101-A), shows a stock tank of 700 gallon capacity to provide water for Lyall's cattle and a trough to provide water for Cooper's cattle. It appears that actually Diversion 2 originally supplied water to the Cooper trough while Diversion 1 supplied most of the needs of the Monument.

On January 31, 1955, Mr. A. van V. Dunn, of the NPS, requested an additional extension of time from the state noting the problems facing the Monument in making final proof. It appeared that Diversion 2 had either ceased flowing or yielded so little water that Diversion 1 was being used as a substitute supply. He also described additional uses which had been made subsequent to the application and an increased storage capacity to offset the decreased spring flow caused by the drought in the Southwest at that time. On February 21, 1955, the State granted an extension of time and suggested the NPS submit a map when the system was completed showing the actual construction as made.

On February 12, 1962, George Miller, Assistant Regional Director, wrote to Mr. Dennis, the District Geologist for USGS, stating that although the existing water system had been adequate to that time, it was not sufficient to provide for future expansion. He requested a ground water study be made with the intent of drilling a well to supplement the current supply. He estimated that 10 to 15 gallons per minute would be required. On March 12, 1962, Mr. Dennis and J. Akers, both of USGS, made a survey of possible sources within the Monument. Mr. Dennis recommended drilling a well at the site of Diversion 2 in Cholla Canyon (the spring which, at that time, had ceased to be used by the Monument). Mr. A. van V. Dunn wrote to the Regional Director suggesting that Mr. Dennis be requested to obtain evidence which might suggest that the source of the well was the same as the source of either of the two Park Service diversions and in this way the NPS might be able to preserve for the well the priorities of the original applications.

A well was drilled in January of 1963 (commencing on the 14th) to a depth of 145 feet. This well, designated as the Headquarters Well, then supplied water to the visitor center and the residences in the Monument.

On Sept. 26, 1966, the Superintendent of Tonto sent a memo to the Regional Director of the Southwest Region discussing the history of grazing and water use at Tonto. He stated that his files contained no record of a Special Use Permit or agreement with either Mr. Cooper or Mr. Schulze (Lyall's successor) for use of Monument land and water for the grazing of their cattle. He recommended that an agreement be reached with the cattlemen and the USFS so as to remedy the current problems the Monument was experiencing.

On November 2, 1966, Mr. Fields wrote in a memo to the Superintendent that no application had been filed with the State of Arizona for the well drilled in the Monument (nor were the previous applications amended). The reason no filing had been made was due to the interpretation of Arizona law at that time, which was that a filing was not necessary unless the well was expected to produce at least 100 gallons per minute.

On August 21, 1973, the State sent Orders to Show Cause to the NPS asking why the State should not cancel Applications A-2601 and A-2602 due to NPS failure to show completion of construction on the two applications. On Sept. 14, 1973, the Regional Director wrote to the State stating that these two sources continued to have "regular and active use" and requested an additional extension of time. The State granted this on Sept. 27, 1973. However, on October 29, 1974, the State cancelled both applications and permits.

On February 4, 1975, the Superintendent of Tonto reported to the Water Resources Division, Western Region of NPS, that the grazing permits would terminate on Dec. 31, 1975 and would not be extended. The Monument plans to fence the area subsequent to this.

Mike Ackerman
Legal clerk
Water Resources Division
April 1975

TONTO DOCKET #3

NOTE:

no error in not filing.
Location Reserved 161-165

Docket #3 covers a well which was drilled on the site of Cholla Springs #2. There was never any application filed under the apparently erroneous assumption that none was required.

What action is desired to correllate docket #2 with docket #3?

154

Southwest Region
P.O. Box 728
Santa Fe, New Mexico
DEC 3 1965

W O D C
DEC 6 1965

CHF
ADM
P & P
ARCH
ENGR
L.A.
CH. M.P.
CONTR
SFTY
ELEC

ACTION TAKEN - DATE
file

Memorandum

To: Director

From: Assistant Regional Director, Operations

Subject: Change in Docket No. 3, Headquarters Well, Tonto

In checking through our docket, we have discovered that we misfiled the Water Analysis for 1965 for the Headquarters Well at Tonto National Monument in Docket No. 1 and labeled it Well No. 1. Would you change the subject line to read Headquarters Well and transfer the analysis to Docket No. 3.

By copies of this memorandum we are advising Chief, WODC and Superintendent, Tonto of the change and ask that they do the same.

(SIGNED)

George W. Miller

In duplicate

cc:
Chief, WODC (2)
Superintendent, Tonto

154

Southwest Region
P.O. Box 728
Santa Fe, New Mexico
87501

JUL 27 1965

W C D C
JUL 29 1965

ADM	
P. O. B.	
ADM.	
ENCL.	7/29
L.A.	
C.N.M.P.	
CONTR	
DTY	
ELEC	

ACTION TAKEN - DATE
file

Memorandum

To: Director

From: Assistant Regional Director, Operations

Subject: Distribution of Docket No. 3, Tonto National Monument

Enclosed is your copy of Docket No. 3 which is for the Headquarters Well at Tonto National Monument. Included in the docket is the water analysis for 1964 and a Narrative Completion Report under Contract No. 14-10-0333-959.

By copies of this memorandum we are sending this docket to Superintendent, Tonto and Chief, WDC for their docket files.

(SIGNED)

George W. Miller

In duplicate

Enclosure

cc: Chief, WDC (2), enc.
Superintendent, Tonto
enc.

TCNTO NATIONAL MONUMENT
Roosevelt, Arizona
December 2, 1963

NARRATIVE COMPLETION REPORT WELL TONT.
Contract # 14-10-0333-939

The drill rig was moved in on January 11. Drilling commenced January 14, under the direction of P. Eldon Dennis of the Geological Survey Office, Tucson, Arizona and the hole was drilled to 10 feet by that evening. The next day the well was drilled to the 25 foot level and temporary casing was extended that far. All the above footage was through surface debris, boulders, and canyon fill material. A small flow or strata of water was encountered at the 23 foot level and a gallon of this water was collected for chemical analysis. Between the 30 foot and 35 foot levels, a 6 inch layer of clay was encountered and according to Tom Weaver, the drill rig operator, the flow of water doubled.

From the surface, down to the 35 foot level, single boulders, (one 3 feet through) and some layers or seams of loose rock, were encountered. From the 35 foot level to the 75-80 foot level, the drilling was through a cemented gravel formation. At the 80-85 foot level, another layer of broken rock was encountered, which became more solid as the drilling continued. At 125 feet, definite evidence of diabase began to show up and the drilling was discontinued at a depth of 145 feet.

A bail test of 15 minutes (duration) was made on January 21. Two hundred thirty four gallons of water were drawn from the well at that time with full recovery made in 45 minutes. An additional bail test was made by P. Eldon Dennis, Geological Survey Office, Tucson, on January 28. At that time, 954 gallons of water were drawn from the well. (Mr. Dennis will report on the recovery of this bailing test as he took and kept notes.)

In all, 26 formation samples were taken on the well, one at 10 feet, one at 20 feet, and every 5 feet from 25 to 145 feet. These were shown to Mr. Dennis on January 28 and following his tests and examination, the sample tests were discarded.

The well was cased with new 6 inch OD-028 inch thick pipe, with the casing extending from the bottom of the well to 4 feet 5 inches above ground. Concrete was placed all around the top of the casing to a depth of 5 feet below ground level and at the suggestion of Mr. Dennis, the permanent casing was packed with 5 cubic yards of clean river-sand, screened $\frac{1}{2}$ to $\frac{3}{4}$ inch, rock and pebbles all the way from the bottom to the 20 foot level. From the 20 foot level, which was above the perforations, to 5 feet below the surface, some 3 cubic yards of hand sized rock and crushed gravel were placed around the casing which filled a good sized cavity between the 10 and 20 foot levels. The packing was discontinued at the 5 foot level. The casing was perforated prior to being placed in the well. The perforations were cut with a $\frac{3}{8}$ inch tip burning torch and were 12 inches long, front and back, for the first

foot, 12 inches long on the two sides for the next foot and they alternated back and forth in this fashion from the bottom to the 25 foot level.

The pumping test began at 8:00 A.M. on February 5 and continued until 8:00 A.M. February 7, with but one interruption, due to a breakdown of the generator the morning of February 6. Mr. Field of the Regional Office has the notes on this test.

P. Eldon Dennis of the Geological Survey, Tucson, was most helpful with advice and suggestions pertaining to the well, the drilling and on what to look for in the way of formations as the drilling progressed. All of which was very much appreciated.



UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

Southwest Region
Santa Fe, New Mexico

APR 20 1964

IN REPLY REFER TO:

L54

Memorandum

To: Superintendent, Tonto

From: Assistant Regional Director, Operations

Subject: Water Analysis, Pump House, Tonto National Monument
, Docket Number 3.

We have enclosed an analysis for the following water source(s):

Pump House, Tonto National Monument

We have placed this information in the correct Docket and by copies of this memorandum are sending them to the Director and Chief, WODC, for insertion in their Dockets.

George W. Miller w o o o

Enclosure(s)

cc: Director (2) w/enc.✓
Chief, WODC (2) w/enc.

original filed in hydrologic
folder # (A-4-12) 34 ad 2

64-611

Miller W O O C

AUG 24 '64

CHF
ADM
PERS
P & P
ARCH
ENGR
L A
SPEC
CONT
SFTY

~~100-471~~
~~21-100-471~~
~~4-21-100-471~~

ACTION TAKEN - DATE

F-4

Docket Information

Number of Documents in Docket	25		
Documents Dated from	3/27/1963	to	6/4/1982
Docket Compiled:	6/21/2011		