



WATER-RIGHT DOCKET

Organ Pipe Cactus National Monument

Docket No: 11

DOS LOMITOS WELL.

Preliminary Docket Information

10-11-1974: water right/source docket information

WATER RESOURCES/WATER RIGHTS DATE: October 11, 1974

WATER RIGHT/SOURCE DOCKET INFORMATION

REGION Western AREA Organ Pipe Cactus National Monument

SITE Dos Lomitos Well

STATE Arizona COUNTY Pima DOCKET NO. WR-11
AWR-#3

LOCATION NE 1/4, NW 1/4 SW 1/4 Sec. 13, T18S, R5W G&SRB&M

REGIONAL BASIN WESTERN MEXICAN DRAINAGE LOCAL BASIN RIO SONOITA

ACQUIRED BY _____

APPLICATION A-3063 PERMIT _____ CERTIFICATE _____

ACTION DUE _____ PRIORITY June 20, 1950 RESERVATION April 13, 1937

QUANTITY 700,000 gpy for Domestic;
1,000,000 gpy for Stockwatering USE _____

STATUS Inactive - caved in due to age SOURCE _____

REMARKS See "Review of Grazing Privileges in Organ Pipe"

NARRATIVE:

The Dos Lomitos Well (Blankenship #2) is located adjacent to the former ranchstead of Mr. Lon Blankenship on public land within the monument. The well was said, by Superintendent Supernaugh, to be about 85 feet deep, to be pumped by a windmill, and to have no evidence of a surface spring.

Application No. A-3063 for the Dos Lomitos Well was filed by Bob Gray on June 20, 1950. The Park Service filed a protest to this application on the basis that (1) the water is not subject to appropriation because it is percolating in the alluvium of the Sonoita Valley, and (2) applicant has access to this well only by a temporary right to use the land for grazing and therefore has no permanent right to gain access to the well to divert the water. On October 3, 1957, the state land commissioner rejected this application as he found that the applicant had attempted to appropriate percolating waters not within the definition of appropriable waters as defined in the Arizona Statutes. On October 29, 1957, the attorney for the applicant filed an appeal. However, on January 18, 1960, the Superior Court for the County of Pima ordered the case be dismissed for want of prosecution.

Upon the death of Bob Gray, Henry Gray who was acting as executor of Bob's estate assigned Bob's interests in all the water right applications (including Application No. A-3063) to the Gray partnership on May 31, 1963. This gesture seems empty since most of these were denied and of no value.

The last surviving member of the Gray Partnership, Bobby Grey, died in 1976. The Monument plans to rehabilitate the well to operational status as a part of an interpretation program for the ranch.

Tim Kern
June, 1978

Compiled by M. Ackerman

Approved by W. Werrell

Page 1 of 1



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

REGISTRATION OF EXISTING WELLS

PRINT OR TYPE - FILE IN DUPLICATE

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

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

FOR OFFICE USE ONLY	
REGISTRATION NO. 55-	629157
FILE NO.	C(18-5)13cba
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:
(File Number) 35- (Control Number)
- The well is located within the NE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$, Section 13, of Township 18 S N/S, Range 5 W E/W, G & SRB & M, in the County of Pima.
 - If in a subdivision: Name of subdivision _____, Lot No. _____, Address _____.
- The principal use(s) of water (Examples: irrigation - stockwater - domestic - municipal - industrial)
Wildlife, Ranch Operations (historical)
- 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 100 feet
 - Diameter of casing 36 inches
 - Depth of casing N/A feet
 - Type of casing steel
 - Maximum pump capacity (windmill) gallons per minute.
 - Depth to water 75 feet below land surface.
 - Date well completed 1918
(Month) (Day) (Year)
- The place(s) of use of water. If same as Item 3, check this box ☒.

Organ Pine Cactus National Monument - Blankenship Well #2
Attach additional sheet if necessary.
- DATE JUN 3 1982 SIGNATURE OF REGISTRANT (Sgd) Gerard S. Witucki
GERARD S. WITUCKI
CHIEF, DIVISION OF WATER RESOURCES

Supporting Hydro Data

USGS 100-9-1964-A

SITE NO. C 18-5) 13cba

Recorded by D. CLAY R. Westphal

U.S. DEPT. OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
GROUND WATER SITE INVENTORY
SITE SCHEDULE

Date Nov 16 1976

Check One ☒ English ☐ Metric Units

GENERAL SITE DATA (1)

Site Ident No. 315130112442401 RG Number R-0* Truncation T-0 D M V *

Site-Type 2- C D H I M P T * Data 3- 0 U L M * Reporting Agency 4- USGS *

Project No. 5- WMD * District 6- 04 * State 7- 04 * County (or town) PIMA 8- 019 *

Latitude 9- 31 51 30 * Longitude 10- 112 44 24 * Lat-Long Accuracy 11- 1 0 T M *

Local Funded 12- C-18-05, 13 CBA Land 13- NENUSW 13, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

Location Map 14- DIAZ PEAK Scale 15- 1:62,500 *

Altitude 16- 1430 * Method of Measurement 17- A L M * Accuracy 18- 10 *

Topo Setting 19- D C E F H K L O P S T U V W * Hydrologic Unit (COWDC) 20- *

Date of First Construction/Completion 21- 00/00/1976 * Use of Site 22- A D E G H B M P R S T U W X Z *

Use of Water 24- A B C D E F H I M N P R S T U Y Z *

Secondary Water Use 25- * Tertiary Use 26- * Depth of Hole 27- 84 * Depth of Well 28- 84 * Source of Depth Data 29- S *

Water Level 30- 85.4 * Date Measured 31- 11/16/1976 * Source 32- S *

Method of Measurement 34- A C E G H L M R O T V Z *

Site Status 37- D F G H I P R S T V X Z *

Source of Geophysical Data 38- * Pump Used 39- X * Measuring Point 266- 4 * Measuring Point Date 267- 11/16/1976 *

OWNER IDENTIFICATION (1)

R-158 * T-0 D M * Date of Ownership 159- 00/00/1963 *

Name: Last 161- BLANKENSHIP * First 162- WELLS * Middle Initial 163- *

OTHER SITE IDENTIFICATION NUMBERS (1)

R-189 * T-0 D M * Ident 190- W# 2 * Assigner 191- OWNER *

New Card Same R & T Ident 190- * Assigner 191- *

SITE VISIT DATA (1)

R-186 * T-0 D M * Date of Visit 187- 11/16/1976 * Name of Person 188- CLAY D. *

FIELD WATER QUALITY MEASUREMENTS (1)

R-192 * T- A D M * Date 193- / / * Geohydrologic Unit 195- *

Temperature 196- 00.0, 0.1, 0.2 * Depth C 197- *

Conductance 198- 00.0, 0.5, 1.0 * pH, etc. 199- *

Other (STORET) Parameter 198- * Value 197- *

Other (STORET) Parameter 198- * Value 197- *

FOOT NOTES:

Source of Data Codes: 1- D B A R L G Z *

reporting district owner other party other top geologist other agency reported

(C-18-5) 13cba

WELL CONSTRUCTION DATA (1)

W-58 T-ADM Entry No. 58-00-1 Date of Construction Completion 8-0-00/00/180 Source of Const. Data 34-5

Name of Contractor/Driller 63

Interval of Construction 64 A B C D H J P R T V W Z

Finish 66 C F G H B P S T W Z Type of Seal 67 U V W X Y Z

Bottom of Seal 68 Method of Development 69 A B C J N P S Z Number of Hours in Development 70

Special Treatment During Development 71 C D E F H M Z

DIMENSIONS OF THE HOLE CONSTRUCTED (2)

W-72 T-ADM Construction Entry No. 58-#

Top of Hole Segment Below LSD 73# 74# 75#

Bottom of Hole Segment Below LSD 74# 75#

Diameter of Hole Segment 75#

New Card for Each Hole Segment Same R, T & Field 58

CASING SCHEDULE (2)

W-76 T-ADM Construction Entry No. 58-#

Top of Casing Segment Below LSD 77# 78# 79# 80# 81#

Bottom of Casing Segment Below LSD 78# 79# 80# 81#

Diameter of Casing Segment 79# 80# 81#

Casing Material 80# 81#

Thickness of Casing 81#

New Card for Each Casing With Same R, T & Field 58

OPENINGS SCHEDULE (2)

W-82 T-ADM Construction Entry No. 58-#

Top of Section Below LSD 83# 84#

Bottom of Section Below LSD 84#

Type of Opening 85# 86# 87# 88# 89#

Type of Material 86# 87# 88# 89#

Diameter of Open Section 87# 88# 89#

Width of Opening 88# 89#

Length of Opening 89#

New Card for Each Open Section With Same R, T and Field 58

FOOT NOTES:

① Source of Data Codes:

E D B A R L G Z

existing, drilled, owner, other gov't, other logs, photograph, other agency reported,

② Type of Opening Codes

F L M P R S T W X Z

fracture, borehole, mud, perforated, well, screen, sand, washed, open, other shuttled or slotted wound (unwound) point hole

③ Casing Material Codes

B C G I M P R S T U W Z

brick, concrete, galv, wrought, other, PVC or, rock or, steel, tile, coated, wood, other iron iron metal plastic stone mud

④ Type of Material Codes for Open Sections

B C G I M P R S T Z

bronze or, concrete, galv, wrought, other, PVC or, aluminum, steel, tile, other bronze iron iron metal plastic mud

LEFT DATA (1)

R-42 * Type of Left 43 # A B C J P R S T U Z *
 see device module
 air, direct centrifugal, jet, piston, rotary, submersible, turbine, vane, other

Full-Flow Section 44 # * Type of Power 45 # D E G H I N W Z *
 direct, electric, gas-turbine, hydraulic, LP gas, internal, windmill, other

Units 38 # * Physical size 46 # *

Model/PUMP DATA (2)									
R-47	T	A	D	M	Type of Lift	43P	50	Manufacturer of Pump	48
add, delete, modify									
Serial No of Pump	49	50	51	52	53	54	55	56	57
Power Company Account No	58	59	60	61	62	63	64	65	66
Person or Company Who Purchased the Pump	67	68	69	70	71	72	73	74	75
Additional Lift	25	26	27	28	29	30	31	32	33
Rated Pump Capacity	250	260	270	280	290	300	310	320	330

STAIRWAY POWER DATA (2) (See LIFT DATA for codes of Inlets 43 and 56 below)

R=55 *	T= A D M *	Type of Lift	43# *	Power of	56+ *	Hoist power	57+ *	Lift Entry No	254 #
add. Motor, capacity									

AVAILABLE LOG DATA (1)

R=1982 T= A D M *
add, delete, modify

Pr = Card for Each Log Type
Source H & T

Type of Log (1)	Begin Depth	End Depth	Source of Data (1)
1982 *	200 -	201 -	202 -
1982 *	200 -	201 -	202 -
1982 *	200 -	201 -	202 -
1982 *	200 -	201 -	202 -
1982 *	200 -	201 -	202 -

WATER QUALITY DATA COLLECTION (1)

R=114	T= A D M	Begin Year 115	End Year 116	Source Agency 117
add, delete, modify				
Frequency of Collection 118	Network Site 257	Type of Application 120		

WATER LEVEL DATA COLLECTION (1)

R = 12 =	T = 0 D M =	Begin Year 122 = 1970 =	End Year 123 =	Source Agency 124 =
add, delete, modify				
Frequency of Collection 3 = 125 =	Network Site 256 =			

DATE INPUT AND SYSTEM/INTERNAL DATA COLLECTION (1)

R=127 *	T= A D M *	Begin Year 128 *	End Year 129 *	Source Agency 130 *
add, delete, modify				
Frequency of Collection 3	131 *	Network Site 209 *	Method of Collection 133 *	C E M U Z *

(1) INPUT DATA AVAILABLE (1)

R=180	T=A D M	Type of Data	181 #		182 =	C D Z *	Format	261 =	F M P Z *
add, delete, modify					LOC				
							Access type, date, value		Date
Item Cattle Sales H & I		Type of Data	181 #		182 =	C D Z *	Format	261 =	F M P Z *
							Access type, date, value		Date

FOOTNOTES

Q: Source of Data Center

S	D	G	A	R	L	G	Z
republican	democrat	united	other	gov't	other	legislator	other
member							

Q: Type of Log Codes

[illegible]

3. Frequency of Collection Cycles

[illegible]

4. Training Facility Analysts' Center

[illegible]

GEOMORPHOLOGIC UNIT DESCRIPTIONS (I)

R = 90 T = A D M Entry No. 256 # Depth to Top 91 = Depth to Bottom 92 =

Unit No. 93 = Lithology 94 = Lithology Modifier 95 =

ALPHABETIC DATA (2)

R = 94 T = A D M Geomorphologic Unit Entry No. 256 #

Date 96 # / / Water Level 120 = % Water Contributed 132 =

GEOMORPHOLOGIC UNIT DESCRIPTIONS (II)

R = 90 T = A D M Entry No. 256 # Depth to Top 91 = Depth to Bottom 92 =

Unit Identifier 93 = Lithology 94 = Lithology Modifier 95 =

ALPHABETIC DATA (2)

R = 94 T = A D M Geomorphologic Unit Entry No. 256 #

Date 96 # / / Water Level 120 = % Water Contributed 132 =

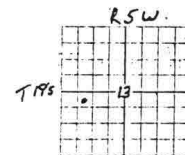
PERTINENT REMARKS

R = 183 T = A 188 =

New Card Series H&T 188 =

188 =

NOTES



U. S. GOVERNMENT PRINTING OFFICE : 1975 O - 579-019

(c-18-5)13cba

FO 9-1904-C

U.S. DEPT. OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
GROUND WATER SITE INVENTORY
MODIFICATIONS SCHEDULE

(C-18-5) 13 cba

Site Ident. No. **WUND**
315130112442401

Check One ☒ English ☐ Metric Units

mod. on sched.

MODIFICATION TRANSACTIONS

SUBMISSION

Date Initials Done

1	R=0* T=NA 21=00/00/1917* 27=84.* 28=84.*	10-28-78
2		
3	R=186* T=NA 187#10/117/1978* 188=ANDERSON TX	
4		
5	R=189* T=NA 190#NA 2* 191=OWNER	
6		
7		
8		
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10		
11		
12		
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29		
30		

0 = ZERO 0 = ALPHA O 1 = ONE 1 = ALPHA I 2 = TWO 2 = ALPHA Z / = SLASH || = VERT. BAR - = MINUS - = HORZ. BAR

The hills on this page do not
1904-6 correspond with the original well sketch

UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

WELL NO. (C-18-5) 13 d b

MP HEIGHT

WMO

GROUND WATER SITE INVENTORY
WATER-LEVEL DATA

Site Ident. No.

3 1 5 1 3 0 1 1 2 4 4 2 4 0 1

R 234 *

$$\begin{bmatrix} T_{11} & A \end{bmatrix} \rightarrow$$
[illegible]

GPO 1976 O-214-13

Method of Measurement

239	A	C	E	G	H	L	M	P	S	T	V	Z
	airline, calibrated,	estimated,	pressure,		calibrated,	geophysical,	manufacturer,	referred,	steel,	electric,	calibrated	other
	airline		gauge		pressure gauge	logs			tape	tape	electric tape	

Site Status

238 =	D	E	F	G	H	B	P	H	S	T	V	X	Z
dry, flowed	flowing, nearby,	nearby,	obstruction,	pumping,	recently,	nearby,	foreign,	surface water,	other				
recently	flowing	flowing	flowing	flowing	pumped	pumping	substances	effluent					

FORM NO 9-1904-A

SITE NO.

(C-18-5) 13c6a

Recorded by D. Clay R. WestphalU.S. DEPT. OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
GROUND WATER SITE INVENTORY
SITE SCHEDULEDate Nov 16 1976Check One ☒ English ☐ Metric Units

GENERAL SITE DATA (1)

Site Ident No 315130112442401 RG Number R-0 Transaction T-0 D M V
 add, delete, modify, verified
 Site-Type 2 C D H I M P T W Data 3 0 U L M Reporting Agency 4 U.S.G.S.
 Project No. 5 WMD District 6 04 State 7 04 County PIMA S- 019
 Latitude 9 31 51 30 Longitude 10 11 24 42 24 Lat-Long Accuracy 11 S 0 T M
 Local Number 12 C-18-05 13CBA Land Net Loc 13 NENWSW 13 T18S ROS W 6
 Location Map 14 01AZ PEAK Scale 15 62500
 Altitude 16 1430 Method of Measurement 17 A L M Accuracy 18 40
 Topo Setting 19 D C E F H K L B P S T U V W Hydrologic Unit (OWDC) 20
 Date of First Construction/Completion 21 Use of Site 22 A D E G H O M P R S T U W X Z
 Use of Water 24 A B C D E F H I M N P R S T U Y Z
 Secondary Water Use 25 Tertiary Use of Water 26 Depth of Hole 27 82 Depth of Well 28 54 Source of Depth Data 29 S
 Water Level 30 73.8 Date Measured 31 12 13 1976 Source 33 S
 Method of Measurement 34 A C E G H L M R S T V Z
 Site Status 37 D F G H B P R S T V X Z
 Source of Geohydrologic Data 38 Pump Used 39 4 Measuring Point 266 4 Measuring Point Date 267 11 16 1976

OWNER IDENTIFICATION (1)

R-158 T-0 D M V Date of Ownership 159 00 00 1963
 Name: Last 161 BLANKENSHIP First 162 WELL Middle Initial 163

OTHER SITE IDENTIFICATION NUMBERS (1)

R-189 T-0 D M V Ident 190 NP 2 Assigner 191 OWNER
 New Card Same R & T Ident 190 Assigner 191

SITE VISIT DATA (1)

R-186 T-0 D M V Date of Visit 187 11 16 1976 Name of Person 188 CLAY, D.

FIELD WATER QUALITY MEASUREMENTS (1)

R-192 T-0 D M V Date 193 Geohydrologic Unit 195
 Temperature 196 0 0 0 1 0 Degrees C 197
 Conductance 198 0 0 0 9 5 μ Mhos 197
 Other (STORET) Parameter 196 Value 197
 Other (STORET) Parameter 196 Value 197

FOOT NOTES:

① Source of Data Codes:

S D O A R L G Z

mounting, driller, owner, other gov't, other logs, geologist, other agency reported.

NATIONAL G W FILE

1430
1256NPS
depth = 76'
I mean 8
10-17-78
SW

(C-18-5) 13c6a

WELL CONSTRUCTION DATA (1)

R = 56 * T = A D M * No 59 00 (* Date of Construction Completion 60-00/00/90/1 * Source of ① 64-5 *

Name of Contractor/Driller 63 *

Method of Construction 65 = A B C D H J P R T V W Z *

Finish 66 = C F G H B P S T W X Z * Type of Seal 67 = B C G Z *

Bottom of Seal 68 = * Method of Development 69 = A B C J N P S Z * Number of Hours in Development 70 = *

Special Treatment During Development 71 = C D E F H M Z *

DIMENSIONS OF THE HOLE CONSTRUCTED (2)

R = 72 * T = A D M * Construction Entry No 59 # * add, delete, modify

Top of Hole Segment Below LSD 73 # * Bottom of Hole Segment below LSD 74 = * Diameter of Hole Segment 75 = *

New Card for Each Hole Segment Same R, T & Field 59

CASING SCHEDULE (2)

R = 76 * T = A D M * Construction Entry No 59 # * add, delete, modify

Top of Casing Segment Below LSD 77 # * Bottom of Casing Segment Below LSD 78 = * Diameter of Casing Segment 79 # * Casing Material ⑤ 80 = * Thickness of Casing 81 = *

New Card for Each Casing With Same R, T & Field 59

OPENINGS SCHEDULE (2)

R = 82 * T = A D M * Construction Entry No 59 # * add, delete, modify

Top of Section Below LSD 83 # * Bottom of Section Below LSD 84 = * (Openings Data) 85 = * 86 = * 87 = * 88 = * 89 = *

Type of Openings ⑥ 85 = * Type of Material ⑦ 86 = * Diameter of Open Section 87 = * Width of Opening 88 = * Length of Opening 89 = *

FOOT NOTES:

① Source of Data Codes: S D B A R L G Z reporting, driller, owner, other gov't, other logs, geologist, other agency reported.

② Type of Material Codes: F L M P R S T W X Z fracture, fractured, mesh, perforated, wire-screen, sand, welded, open, other shuttered or slotted mound (unknown) point hole

③ Casing Material Codes: B C G I M P R S T U W Z brick, concrete, galv, wrought, other, PVC or, rock or, steel, tile, coated, wood, other iron iron metal plastic stone steel

④ Type of Material Codes for Open Sections: B C G I M P R S T Z brass or, concrete, galv, wrought, other, PVC or, stainless, steel, tile, other bronze iron iron metal plastic steel

GEOHYDROLOGIC UNIT DESCRIPTIONS (1)

R = 90 * T = A D A Entry No 256 # Depth to Top 91 = Depth to Bottom 92 =

Unit Identifier 93 = Lithology 96 = Lithologic Modifier 97 =

AQUIFER DATA (2)

R = 94 * T = A D M * GeoHydrologic Unit Entry No 256 #

Date 95 # / / Water Level 126 = % Water Contributed 132 =

GEOHYDROLOGIC UNIT DESCRIPTIONS (1)

R = 90 * T = A D M * Entry No 256 # Depth to Top 91 = Depth to Bottom 92 =

Unit Identifier 93 = Lithology 96 = Lithologic Modifier 97 =

AQUIFER DATA (2)

R = 94 * T = A D M * GeoHydrologic Unit Entry No 256 #

Date 95 # / / Water Level 126 = % Water Contributed 132 =

PERTINENT REMARKS

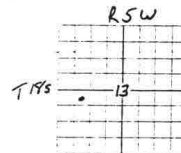
R = 183 * T = A * 185 =

New Card Same R&T 185 =

NOTES:

WATER LEVEL MEASURED 12-13-76 by RUA
depth to water 73.8' blw land surface
(mill off of well & laying down).

WATER LEVEL MEASURED 10-17-78 by RUA T. Anderson
depth to water 77.6' blw land surface
(no pumping to south, mill still off).



U. S. GOVERNMENT PRINTING OFFICE : 1975 O - 575-019

(c-18-5)13cba

PERMANENT REFERENCE
Do Not Discard

FORM 9-1642B
(DEC. 68)

NATIONAL PARK SERVICE

Well No. (C-18-5) 13 cba

WELL SCHEDULE

U. S. DEPT. OF THE INTERIOR

GEOLOGICAL SURVEY

WATER RESOURCES DIVISION

MASTER CARD

Record by W. Werrell Source of data Field Date July 13, 73 Preliminary Map: Map Nariz Mtn 1, SW-7½'

State Ariz County 04 Pima 10

Latitude: 31° 51' 31" N Longitude: 111° 24' 42" W Sequential number: 1

Lat-long accuracy: 11 T. 18 N. 5 Sec. 13 NE 1 NW 1 SW 1 G & SR PM

Local well number: C-18-05-13 CBA Other number: Blankenship Well #2

Local use: Blankenship 2 Owner or name: National Park Service

Ownership: (C) County, Fed Gov't (F) City, Corp or Co, Private, State Agency, Water Dist (M) (N) (P) (S) (W) F

Use of (A) (B) (C) (D) (E) (F) (H) (I) (M) (N) (P) (R) (S) (T) (U) (V) (W) (X) (Y) (Z) S

Water: (S) Stock, Instit, Unused, Repressure, Recharge, Desal-P S, Desal-other, Other S

Use of (A) (D) (G) (H) (O) (P) (R) (T) (U) (W) (X) (Z) W

Well: Anode, Drain, Seismic, Heat Res, Obs, Oil-gas, Recharge, Test, Unused, Withdraw, Waste, Destroyed W

DATA AVAILABLE: Well data 70 Freq. W/L meas.: 71 Field aquifer char. 72

Hyd. lab. data: 73

Qual. water data: type: 74

Freq. sampling: 75 Pumpage inventory: yes 76 no 77 period: 78

Aperture cards: 79

Log data: 78 79

WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD Depth well: 100 ft 100 Meas. Reported 6

Depth cased: 0 ft 0 Casing 48 in 48

Finish: (C) porous gravel w. (F) gravel w. (H) horiz. open (O) perf., screen, sd. pt., (W) (X) (Z) W

Method: (A) concrete, (per.) (screen), gallery, end, (P) (S) (T) (U) (V) (W) (X) (Z) W

Drilled: (A) air bored, cable, (D) hyd jetted, (H) percussive, rotary, (P) (R) (S) (T) (U) (V) (W) (X) (Z) P

Date 1918 918 Pump intake setting: 6 ft 6

Driller: Lon Blankenship name (L) (N) (P) (R) (S) (T) (U) (V) (W) (X) (Z) P Deep D

Lift: (A) air, bucket, cent, jet, (C) (J) multiple, multiple, (N) (P) (R) (S) (T) (U) (V) (W) (X) (Z) P Shallow D

Power: (type) diesel, elec, gas, gasoline, hand, gas, wind, H.P. 6 Trans. or meter no. 6

Descrip. MP 6 ft above LSD, Alt. MP 6

Alt. LSD: 1429 1429 Accuracy: USGS Topo - Elev. given 3

Water Level: 75.01 ft above MP; Ft 75 LSD 75 Accuracy: Measured A

Date June 11, 1952 652 Yield: 652 spm 652 Method determined 652

Drawdown: 652 ft 652 Accuracy: 652 Pumping period 652 hrs 652

QUALITY OF WATER DATA: Iron 652 Sulfate 652 Chloride 652 Hard. 652

Sp. Conduct 652 K x 10 652 Temp. 652 Date 652 sampled 652

Taste, color, etc. 652

Well No. (C-18-5) 13 cba

Well No. (C-18-5) 13 cbaLatitude-longitude 31.51.31 ^N 112.44.24
d m s d m s

HYDROGEOLOGIC CARD

SAME AS ON MASTER CARD		Physiographic Province: <u>Basin & Range</u>		Section: <u>Sonoran</u>	
Desert <u>B</u>		Drainage Basin: <u>Western Mexican Drainage W.M.D.</u>		Subbasin: <u>Rio Sonora</u>	
(D) depression, stream channel, dunes, flat, hilltop, sink, swamp, Topo of well site: (P) (S) (T) (U) (V) <u>P</u> offshore, <u>pediment</u> , hillside, terrace, undulating, valley flat					
MAJOR AQUIFER:		system _____ series _____		aquifer, formation, group _____	
Lithology: _____		Origin: _____		Aquifer Thickness: _____ ft	
Length of well open to: _____ ft		Depth to top of: _____ ft		_____ ft	
MINOR AQUIFER:		system _____ series _____		aquifer, formation, group _____	
Lithology: _____		Origin: _____		Aquifer Thickness: _____ ft	
Length of well open to: _____ ft		Depth to top of: _____ ft		_____ ft	
Intervals Screened:					
Depth to consolidated rock: _____ ft		Source of data: _____		_____	
Depth to basement: _____ ft		Source of data: _____		_____	
Surficial material: _____		Infiltration characteristics: _____		_____	
Coefficient Trans: _____ gpd/ft		Coefficient Storage: _____		_____	
Coefficient Perm: _____ gpd/ft ²		Spec cap: _____ gpm/ft		Number of geologic cards: _____	

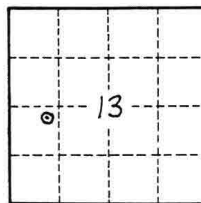
See enclosed: Notes on "Blankenship Well".

Well is locally known as "Blankenship Well" and/or "Dos Lomas Well".

See: Coates, D.R., 1952, Geology of ground water in the Organ Pipe Cactus National Monument: U.S. Geol. Survey open-file report. Coates reports that the "Dos Lomas Well" was dug "about 100 feet".

Mr. Jack Grey, lifetime resident of the area, reported to Richard Weaver, National Park Service, that he had dug the well out to a depth of about 113 feet. This was apparently done in the early 1940's.

See: Inventory of All Wells in ORPI, by park, Dec 15, 1951. This well is reported to be dug prior to 1910. This fact does not agree with other data - see Notes on "Blankenship Well", U. Wierrell, 9/73.



Well No.

(C-18-5) 13 cba

GPO 869-201

Other Supporting Information

NOTES ON "BLANKENSHIP WELL"

Some publications covering Organ Pipe Cactus National Monument list data for a well termed "Blankenship Well", and the present U.S.G.S. topographic map shows a "Blankenship Well" which is designated by name. Individuals concerned with either the history of the area or hydrologic data have applied data of the publications to the well shown on the map. This is incorrect - not because of errors in the publications or on the map; but because there are two wells, each of which is "Blankenship Well." The following material is presented in order to clarify the circumstances and/or situation such that further misapplication of data will not occur.

Lon Blankenship was an early day rancher (circa 1910) in the area now designated as Organ Pipe Cactus National Monument. To satisfy his needs for water, he dug or drilled several wells in the area including two dug wells along the international boundary. As was the local custom, each of the dug wells was termed with the name of their owner and thereby became the "Blankenship Well." One of these wells (the first to be dug) is reported in the papers¹ written by Kirk Bryan and published in 1922 and 1925. This well has since been filled in (destroyed) and knowledge of its existence has been lost to all but a single old timer in the area. The second well was dug after Bryan's field work was completed in 1917, and was officially designated the "Blankenship Well" (name is printed on the map) when the area was mapped by the USGS in 1963. Recently, a great deal of confusion has arisen as to the location of, and data pertaining to, the "Blankenship Well" due to the misapplication of Bryan's data to the well shown on the USGS map.

A Blankenship Well is referred to in Bryan's report of 1925. The location of this well is established by Bryan on page 342 (i.e., "boundary monument 167 west of well") and on page 219, where, after giving data on the well, he states "there is also a well at Dowling, about 1 mile to the West." (Also see the map in Bryan's report which shows the well location as due North of Soncita, Mexico.) From these descriptions, it is surmised that the well spoken of was located in the present Lukeville area. I checked with Mr. Bobby Gray, lifetime resident of the area, as to the presence of a "Blankenship Well" at Lukeville. He personally remembered the well and recalls that it was in fact known locally as the Blankenship Well and was completely filled in "several years back." The well was located about 25 to 50 feet north of the international boundary, just south of the present line of buildings which contains the cafe, grocery store and post office. No trace of the well remains, the area is now a parking lot. No one in Lukeville has any recollection of the well.

The USGS topographic map; Diaz Peak, 1963, shows a "Blankenship Well" (See also USGS preliminary map, Nariz Mountain #1 SW). This well is

presently known by two names to local residents and the NPS. It is known as the "Blankenship Well" and/or the "Dos Lomitos Well" and is located about 5 miles east of the "Blankenship Well" described by Bryan.

Some speculation and further scrutiny of Bryan's data may be of further assistance in clarification of the "Blankenship Well" confusion. On page 181 of Mr. Bryan's 1925 paper, he reports that the Blankenship Well was dug in 1917 - note that the data collected by Bryan is dated September and October of that year (see pages 165 and 181). It appears that from this field data, Bryan wrote both of his papers which were published in 1922 and 1925; the lapsed time between field work and publication being used to compose, edit and print the papers. The "Blankenship Well" shown on the USGS map was not in existence in 1917 or it would have been reported by Bryan. It is almost certain that Bryan met Blankenship during his field work. It is very likely that during their meeting Bryan expressed his idea about further water wells in the area (see page 219 of the 1925 paper, where, after discussion of the Blankenship Well, Bryan states "two or three other wells spaced at intervals along the international boundary should be equally successful in obtaining water..."). It seems logical that Mr. Blankenship acted on this suggestion and proceeded to dig the well shown on the USGS map. The well was probably dug in 1918 (this complies with general information about the area as supplied by Mr. Bobby Gray).

In order to avoid further confusion as to the Blankenship Well" and to provide a reference to Bryan's work and current USGS maps, I have elected to designate "Blankenship Well #1" as the well referred to by Bryan and designate "Blankenship Well #2" as the well shown on the USGS topographic maps.

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1. Bryan, Kirk, 1922, Routes To Desert Watering Places in the Papago Country, Arizona; U.S. Geological Survey Water-Supply Paper 490-D, p. 1 - 429.
Bryan, Kirk, 1925, The Papago Country, Arizona; U.S. Geological Survey Water-Supply Paper 499, p. 1 - 427.

William Werrell
September 1973

RECONSTRUCTION OF BLANKENSHIP WELL

ORGAN PIPE CACTUS NATIONAL MONUMENT

Work Order No. 8660-0008511

Progress report by: Richard K. Weaver CET

The purpose of this project was to reconstruct this old historic well with modern methods for future use in regard to the interpretive plan of Blankenship Ranch. According to unwritten records this well is some 57 years old. It was originally hand dug to about a depth of 90 to 107 feet. In later years, Jack Grey had dug out more material to about 113 feet. This was due to the lowering water table and caveins. He has not been in this well for 30 years, according to our on site conversation with him on April 26, 1973.

The depth of this well before starting this project was 76 feet from the top of the concrete and rock square framework around the 35" by 30" opening. This framework is 19" high from the ground to the top. The well itself is cased with wood timbers around the square opening to the bottom of the 76' depth at least. There is some water at the bottom of this existing depth.

On April 20 several quotes were obtained to do the following work:

1. Bail the well of loose material and debris
2. Install 18" culvert pipe to the depth of 113' if possible

The only quote available was from Gilbert Pump Co. of Tucson of which was to be at another well site at ORPI the 23rd of April. All other firms could either not do the work or could not be contacted. Gilbert Pump Co. was given the job and moved to the Blankenship Well site on Wednesday April 25, 1973. On Monday and Tuesday the 23rd and 24th, the park staff were preparing for the lowering of the existing windmill over the well. This mill is about 30 feet high with a 10 ft. Aeromoeter blade. It was determined that the pump firm could do a better job with their equipment to lower this mill. The pump firm had started to move into the well site at 7 a.m. and then proceeded to set up for lowering the windmill. This job took until 12 p.m. The park maintenance crew was doing most of the welding and other miscellaneous task in getting it lowered. They also removed the loose logs that were across the opening of the well.

At 1:00 p.m. the pump company began lowering the 10" bailer and very slowly began removing the loose material in the bottom of the well. It was a tedious task because the log walls of the well were very fragile due to loose logs. This process was continued until 2:30 p.m. At 3:20 p.m. the 18" galvanized culvert for well casing was delivered by Garland Steel Co. of Phoenix. The sections were in 20 ft. lengths and the first

length was perforated with a cutting torch and carefully lowered into the well opening by the well rig of the pump company. The next section was raised and welded and clamped to the first and this process continued until 80 feet of casing was in place and resting on the bottom of the well. The well or pump firm again began bailing or attempting to bail and found some very hard material to penetrate, bringing very little water up as they bailed. This process continued until 6:00 p.m.

On April 27, 1973 at 8:39 a.m. the crews again began hitting the hardened material with their bailer. This continued until 11:00 a.m. when they finally broke through some old wood and rock. The bailer then ^{casing} began to lower itself to the point where a five foot section was cut and welded to the lowered portion. This process continued until about 2:00 p.m. when hard dry material was hit and no water was available. After some discussion with the Gilbert Co. Supervisor, Joe Brown, it was decided that we should either abandon the bailing or get some water and try and break this crust. I decided that it was worth a try to get some water truck to the site and add water. In the meantime I went to headquarters to confer with the Park Superintendent about the problem. He agreed that maybe we have done about all we could to preserve the well structure and maybe we should discontinue.

Upon returning to the well site the bailing was continuing with the water truck adding some water. The hard portion of the well was broken through and they went through some gravel and hit a water vein or aquifer. By 5:00 p.m. the bailer was delivering some water and mud with the casing lowering, by 6:00 p.m. the mud got thicker and a five foot section of casing was welded in place with two feet above the concrete and rock square opening. A couple of more bailings showed that there was some mud and a little water. After some discussion with Gilbert pump it was decided that it was not practical to continue at this pace. Because of the changing conditions and time adding to the cost we felt it more practical to have a drill rig continue the process. During the later part of the day, Mr. Jack Grey was on hand to give us some information about the well. He had not been in this well for 30 years but in the early years the water table seemed to be dropping and he had dug out the bottom to get enough water for his cattle operation. This depth was from 107 to 113 feet. Based on the lowering water table and the slow process I had the well reconstruction stopped and the work was completed at 7:30 p.m.

Based on the following information it is recommended that a contract be let by water resources in region to drill additional depth of about 185 feet to obtain a more suitable aquifer for (1) Monitor water use in area by measuring periodically under water resources program (2) To obtain an adequate quantity of water to pump by windmill for park interpretive program (3) To obtain an adequate quantity of water for domestic use for future visitor use. A submersible electric pump could be installed at the bottom of the well and the windmill portion could pump above the electric pump for park interpretive program. There is currently a two h.p. submersible pump in stock at Saguaro NM which is not used. It was recently pulled from a dried up well at quarters No. 43. The pump

is only a few months old. An electric power source would have to be made available. In the meantime the windmill could supply a portable supply for the visitor drinking and interpretive use. A sketch plan is enclosed for clarity.

An irrigation well is currently being utilized about a mile away by the people of Mexico. Its' depth is 275 feet and pumps approximately 400 GPM.

The reconstruction costs of the Blankenship Well thus far is as follows:

1. Moving in and out of site, bailing well and installing 18" galvanized, spiral culvert as casing = \$ x 20 hrs. \$500.00
2. 100 feet galv., spiral culvert @ \$4.55 per ft. = \$455., 4 ea. steel galv. bands @ \$4.55 ea. = \$18.20 frt. = \$1.25 per driving mile = \$175.00 Total to Garland Steel Co. + 648.00
3. 120 ft. 3/8" steel galv. soccer rod @ \$.75 ft. = 90.00
4. Organ Pipe Cactus personnel costs:

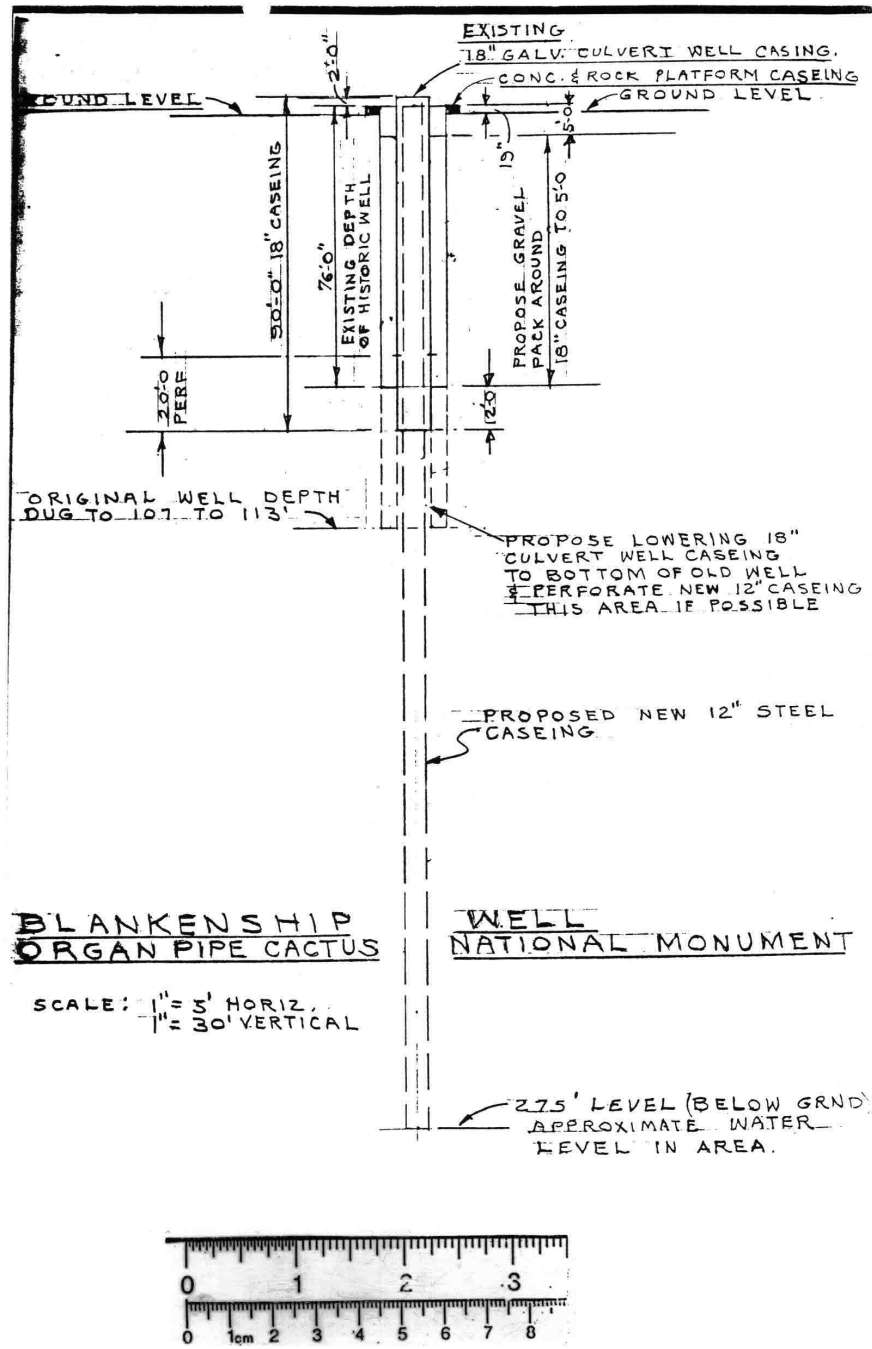
Flynn	2 MD	= 16 hrs.	@ \$6.42 hr.	= \$113.00
Thomas	3 "	= 24 "	@ 4.77 hr.	= 126.00
Worsham	4 "	= 48 "	@ 4.77 hr.	= 168.00
Roth	1 "	= 8 "	@ 4.24 hr.	= 37.00
Julander	1 "	= 8 "	@ 4.14 hr.	= 36.00
Kohr	PMD	= 3 "	@ 3.72 hr.	= 98.00
			<u>577.00</u> *	<u>577.00</u>

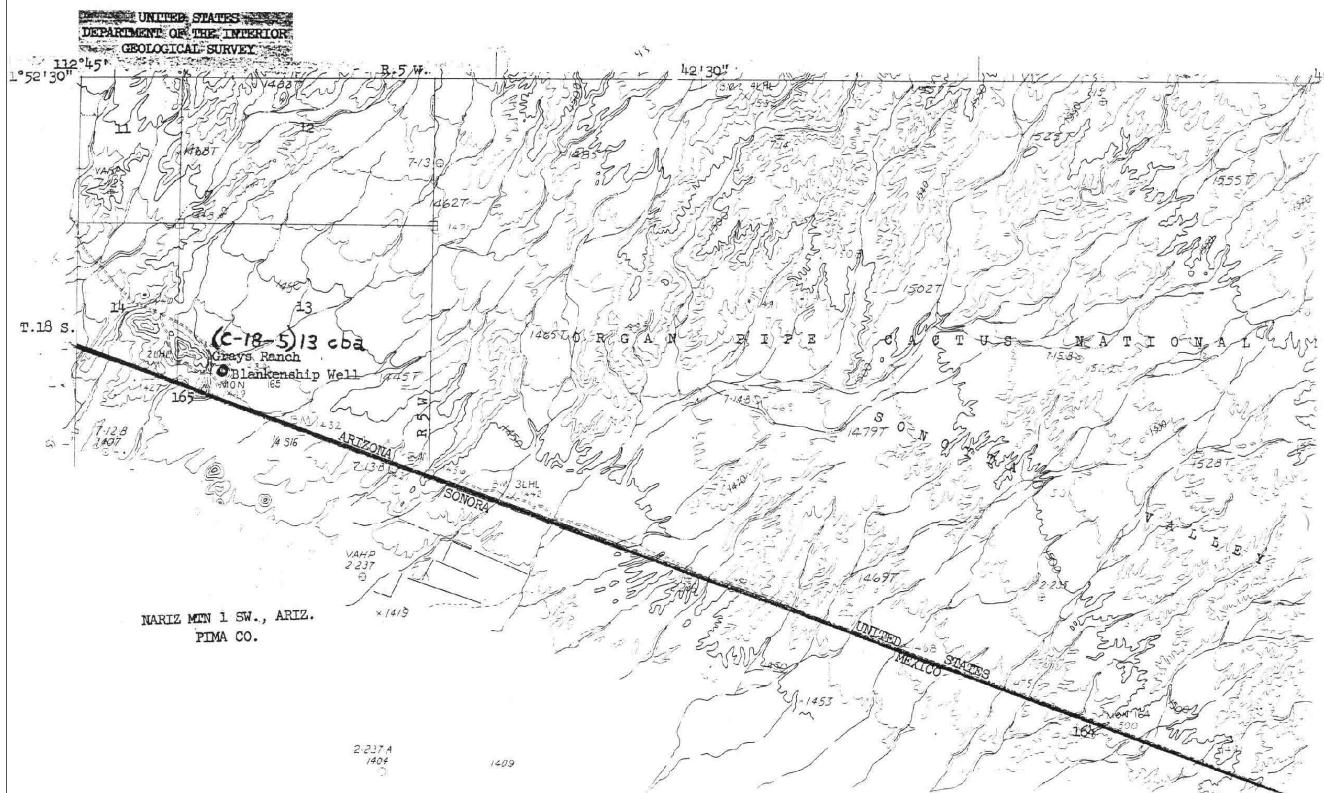
*This total figure is with estimated benefits by U.S. \$1825.20 Government

Total projects costs charged to work order --	\$1825.20
Costs of supervision by SOAR (per diem = \$44.00)	44.00
* charged to SOAR account	<u>1869.20</u>
Total Job Costs to date	

Although there was about twelve feet of casing lowered into the cavein portion of the well, this project took a great deal of cooperation and active participation by the park staff, especially the Park Maintenance.

Jack Worsham worked extra hard to get the welding completed and prepare the windmill for lowering by building scaffolding. The comment by the Gilbert Pump Co. representative was that this was one of the best crews he had worked with. I personally enjoyed the work with the park staff and contractor.





Docket Information

Number of Documents in Docket 20

Documents Dated from 7/13/1973 to 6/3/1982

Docket Compiled: 6/3/2011