



WATER-RIGHT DOCKET

Devils Tower National Monument

Docket No: 5

UTILITY AREA, DEEP WELL #1.

Preliminary Docket Information

08-21-1961: water right record ; august 21, 1961

WATER RIGHT RECORD

Park: DETO

Docket Number:
Federal #5

IDENTIFICATION NO: DETO W 1 8, 5 3, 6 5, A, F, 0 5,

DITCH/WATER SYSTEM: Utility Area

SOURCE OF SUPPLY: Deep Well #1

LOCATION: NW $\frac{1}{2}$ NW $\frac{1}{2}$, Sec. 18, T53N, R65W, 6th PM

WATER RIGHT:

Appropriator: United States of America, National Park Service

Application/Permit Number: UW 1923 - Page 58

Certificate Record Number:

Date of Priority:

Quantity of Water:

Purpose: Domestic, recreational, fire protection.

Irrigated Land Description:

NOTE: WELL DRILLING INFORMATION CAN BE FOUND IN RESOURCE ROOM, WRO.

SUMMARY OF STATUS: This is a Federal water right.

An Application for Permit to Appropriate Underground Waters in the State of Wyoming was filed.

The well was started August 21, 1961, completed December 21, 1961, deepened in July, 1962. Notice of Completion of the Application of Underground Water to Beneficial Use was completed in July, 1962.

Permit UW 1923 approved June 9, 1967.

*H09 well - presently used for normal H2O needs - weather center - etc.
pumping at 528 p.m. - pump up to 20,000 reservoir & then pump up to another 25,000
gals. reservoir.*

WATER DOCKET INFORMATION

A R E A DEVILS TOWER NM

DOCKET NO. 5

APPLICATION NO. Page 68

PERMIT NO. U.W. 1923

CERTIFICATE NO.

TITLE OF DOCKET Utility Area, Deep Well No. 1

PRIORITY

REMARKS:

DOCKET INFORMATION SHEET

Docket Identity	DETID 4118153165 AF 105
Region	ROCKY MOUNTAIN
Area	DEWILS TOWER NATIONAL MONUMENT
Site	UTILITY AREA DEEP WELLS
State	WYOMING
County	CROOK
Docket	DETID WATER RIGHT DOCKET 5
Location	TISN RGSW SEC 114 NW 1/4 NW 1/4
Acquired by	APPROPRIATION
Application	
Permit	W 11923
Certificate	
Priority	
Reservation	SEAT 24 11996
Status	ACTIVE FEDERAL
Source	GROUND WATER
Use	DOMESTIC RECREATIONAL FIRE PROTECTION
Quantity	
Hydrologic Unit	110120201
Remarks	WELL STARTED AUG 21 1961 COMPLETED DEC 21 1961 DESPENDED JULY 1962 NOTICE OF COMPLETION OF THE APPLICATION OF GROUND WATER TO BENEFICIAL USE JULY 1962 PERMIT W 11923 APPROVED JUNE 9 1967

NOTE: "DO NOT FOLD THIS FORM. — ONLY FORMS COMPLETED WITH TYPE-WRITER OR NEATLY LETTERED WITH WATERPROOF INK WILL BE ACCEPTED."

Form UW4-A

STATEMENT OF COMPLETION OR ABANDONMENT OF PERMIT NO. U. W. 1923

UNDERGROUND WATERS

UNDER CHAPTER 159, SESSION LAWS OF WYOMING, 1957

WATER DIVISION NO. 2 UNDERGROUND WATER DISTRICT Crook County

I, William E. Fields of San Francisco
County of San Francisco State of California
being duly sworn according to law, upon my oath say:

- The name of the permittee or present owner is The United States of America, Department of the Interior, National Park Service
- The postoffice address of the permittee or present owner Devils Tower National Monument, Devils Tower, Wyoming 82714
- The name of the well is Utility Area, Deep Well # 1 53-65-18bdd2
(Designate by name and number)
- Description of well: Location 1,250' South and 1,008' East feet from the corner of Section 18 T. 53 N., R. 65 W., and is in the NW $\frac{1}{4}$ of Section 18 T. 53 N., R. 65 W.; the type of well is: Drilled (☒) Dug () Driven () Jetted () Other ()

CASING RECORD

Diameter Inches	Lbs. Per Foot	DEPTH		PERFORATIONS	
		Top	Bottom	From	To
6" I.D.	19-18	0	824		
5" O.D.		735	1096		
2½" I.D.		1064	1341	1315	1341

CEMENTING RECORD

DEPTH IN FEET		No. Sacks Cement	Method Used
From	To		
0	10		
735	824	200	
1064	1096	Total	

Total depth of well 1341 feet, depth to static water level in well 24 feet.

FLOWING ARTESIAN WELLS ONLY: Is well equipped with gate valve? Yes () No ().

Name and address of driller Schnell Incorporated, P. O. Box 272, Dickinson, North Dakota

Date of commencement of well August 21, 1961

Date of completion of well December 21, 1961
deepened July 1962

5. If well under this permit is to be abandoned, please state reasons for abandonment. (If well has been abandoned, it will not be necessary to complete the balance of this form, except for log of well, Item 14, and signature before a Notary Public).

3. Description of pump: Make Roda; type Turbine - Submersible
rated capacity of pump 55 gal. per minute.
(Centrifugal, turbine, rotary, plunger)

7. Description of power plant: Method of operation Electric motor
Horsepower of engine or motor 5
(Electric motor, steam or gasoline engine, etc.)

8. Give date pump and power plant were installed and works completed 1st July, 1962
new pump installed 2nd Feb., 1966

9. Record of Pumping Test (to be supplied by person or firm making test). Name and address of person making test. William A. Mott, Hydraulic Engineer, National Park Service, Midwest Region
date of test, September 27-28, 1962; depth to water before test, 23.7 feet, and immediately afterward 22.9 feet; Length of test, 17 hours; average discharge, 45 gal. per minute.

Permit No. U. W. 1923

Page No. 68

1963

10. Actual cost of well and pumping equipment \$31,150.00 Dollars.

11. If well is for irrigation purposes, and acreage to be served by well differs from lands described in permit, please re-describe lands in space below:

SAME AS PERMIT

12. Depth at which main zone of water was encountered is 1315 feet to 1341 feet, and the water bearing formation is limestone
(Sand, gravel, shale, clay, limestone, sandstone, etc.)

13. If other water zones were found, give depth to each:
1143 feet to 1200 feet.
feet to feet.

14. LOG OF WELL. (If additional space is needed attach extra sheet).

TYPE OF MATERIAL ENCOUNTERED (Give color and tell whether hard or soft)	DEPTH IN FEET		Thickness in feet	REMARKS (Especially information as to water found)
	From	To		
Alluvium:				
Sand, light-gray, fine to medium, silty	0	13	13	
Sand, light-gray, medium to coarse	13	18	5	
Speargish Formation:				
Siltstone, dark-red, sandy	18	60	42	
As above; contains stringers of white gypsum and some greenish-gray shale	60	80	20	
Siltstone, dark-red	80	160	80	
As above; contains some dark-gray shale	160	170	10	
Siltstone, dark-red	170	198	28	
Shale, red, soft; some white gypsum	198	200	2	
Siltstone, dark-red; some stringers of white gypsum	200	234	34	
Anhydrite, hard	234	239	5	
Gypsum, white	239	240	1	
Siltstone, dark red; some grayish-green shale and gypsum	240	270	30	
Siltstone, dark-red, sandy, and stringers of gypsum	270	350	80	
As above, more sandy; contains thin beds of limestone	350	370	20	

SEE ATTACHED

REMARKS: NOTHING HEREIN CONSTITUTES A WAIVER OF THIS RIGHT OR ANY OTHER WHICH MAY BE VESTED IN THE NAME OF THE UNITED STATES OF AMERICA

(Signed)

William E. Filer

THE STATE OF WYOMING,

County of _____

} ss.

I hereby certify that the foregoing statement was signed in my presence and sworn to before me by

William E. Filer, this 20 day of October, 1961

My Commission Expires _____, 19____

Notary Public.

Date of Receipt: October 20, 1961

T. J. Light
State Engineer.

DEPUTY CLERK DISTRICT COURT
THE U. S. NOR. DIST. OF CALIFORNIA

14 LOG OF WELL CONT'D

TYPE OF MATERIAL ENCOUNTERED	DEPTH IN FEET		THICKNESS IN FEET
	FROM	TO	
Spearfish Formation:-- continued			
As above, hard, brittle; contains fine to very coarse sand grains	370	380	10
Siltstone, brownish-orange, clayey; some fine to coarse sand, abundant gypsum	380	410	30
Shale, brownish-orange, and thin beds of dark-green shale	410	420	10
Siltstone and shale, interbedded, brownish-orange, slightly sandy; green shale and some gypsum	420	440	20
Shale, brownish-orange, and gypsum	440	452	12
Shale, alternating dark-red and pale-greenish-gray; gypsum	452	459	7
Minnekahta Limestone:			
Limestone, light-gray, silty, and interbedded light-gray shale	459	490	31
Opeche Formation(?):			
Limestone, light- to pinkish-gray, and light- to reddish-brown shale; contains small grains of magnetite	490	530	40
Limestone, light-gray, limonitic; contains pyrite crystals and magnetite nodules	530	580	50
Minnelusa Formation:			
Limestone, white to pinkish-gray, silty, and very fine- to fine-grained sandstone, fragments of magnetite and pyrite	580	590	10
Sandstone, pale-brown, fine-grained, calcareous; contains some silty limestone, dolomite, and gypsum, fragments of magnetite and pyrite	590	611	21
Limestone, dolomite, and anhydrite, interbedded; contain thin beds of sandstone and stringers of gypsum, some reddish-brown shale	611	690	79
Shale, reddish-brown, calcareous, and gray fine-grained sandstone, interbedded; much gypsum and traces of dolomite and bluish-gray shale	690	760	70
Sandstone, light-gray, fine-grained, well sorted, friable; some limestone, dolomite, gypsum, and brown shale in upper part	760	840	80
Interbedded light-gray fine-grained friable sandstone and light-gray limestone; contains some thin beds of dolomite and stringers of gypsum	840	900	60
Limestone, light- to pinkish- and dark-gray, hard, brittle; contains much white massive gypsum and many pyrite crystals	900	940	40
As above, only traces of gypsum	940	970	30
Sandstone, light-gray, very fine-grained, calcareous; some greenish-gray shale	970	980	10
As above; contains some pinkish-gray, hard silty limestone, light-gray calcareous shale, and gypsum	980	990	10

14. LOG OF WELL CONT'd

TYPE OF MATERIAL ENCOUNTERED	DEPTH IN FEET		THICKNESS IN FEET
	FROM	TO	
Minnelusa Formation:--continued			
Interbedded light gray hard dolomitic limestone, dolomite, and white very fine-grained calcareous sandstone; contains white massive gypsum and some greenish-gray shale; pyrite crystals and biotite clusters common	980	1,060	70
Limestone, light-gray, soft, silty; contains some greenish-gray shale and chert nodules	1,060	1,090	30
Limestone, white to light-gray, hard, dolomitic; contains much chert and some greenish-gray calcareous shale; pyrite crystals and biotite clusters common	1,090	1,110	20
Limestone, pale-orange-brown, marly, very soft; some light-gray shale	1,110	1,130	20
Shale, red, limy, and white soft sandstone; some greenish-gray shale	1,130	1,140	10
Limestone, marly, and green and red shale	1,140	1,160	20
Limestone, white to light-gray, silty, hard, cherty; contains pyrite crystals	1,160	1,170	10
Limestone, white to light-gray, marly soft	1,170	1,200	30
Limestone, white, crystalline to non-crystalline, and pale brown crystalline dolomite; thin beds of fine- to medium-grained sandstone in middle and lower parts; some gypsum and pyrite	1,200	1,240	40
Sandstone, white, fine- to medium-grained; contains some pyrite crystals	1,240	1,255	15
As above; contains thin beds of reddish-brown siltstone and shale that decrease in number toward base; traces of gypsum	1,255	1,290	35
Sandstone, white to rusty-brown, fine- to medium-grained, and white oolitic and non-crystalline limestone, interbedded	1,290	1,299	9
Pahasapa Limestone:			
Limestone, white, finely to non-crystalline, hard, siliceous and cherty; contains a few thin beds of sandstone in upper part	1,299	1,323	24
As above, less siliceous, cavernous	1,323	1,341	18



STATE ENGINEER'S OFFICE

~~Cheyenne~~

June 20, 1967

U. S. Dept. of Interior
National Park Service
Devils Tower National Monument
Devils Tower, Wyoming 82714

Gentlemen:

Enclosed herewith is a ~~xxx~~ copy of the following permit_.
~~THIS~~ This permit_ was ~~was~~ approved under date of June 9, 1967.

Permit No.

U. W. 1923

Name of Well

Utility Area Deep Well #1
53-65-18bbd2

The law requires that a limit be placed on the time allowed for commencement of work, completion of construction and completion of the application of water to beneficial use. These time limits are indicated in the permit_. If the terms of the permit_ are complied with prior to the expiration of these time limits, it is also required that the State Engineer be notified of this by the filing of the proper notices. Enclosed, for your convenience, are blank forms for this

U. S. Dept. of Interior
National Park Service

June 20, 1967

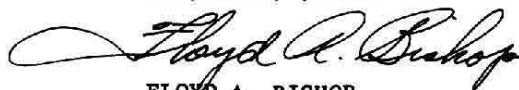
Page 2

purpose. It is important that these "notices" be filed in order to keep your permit in good standing on our records.

If the work proposed under the ~~above~~ permit__ cannot be accomplished within the time allowed, an extension of time for compliance with any of the specified requirements may be granted by the State Engineer for good cause shown. However, a request for such extension must be made before the time specified in the permit expires.

If the enclosed permit__ should be lost or destroyed additional copies can be furnished you for a nominal charge.

Very truly yours,

A handwritten signature in cursive script, reading "Floyd A. Bishop".

FLOYD A. BISHOP
State Engineer

NOTE: "DO NOT FOLD THIS FORM. — ONLY FORMS COMPLETED WITH TYPE-WRITER OR NEATLY LETTERED WITH WATERPROOF INK WILL BE ACCEPTED."

Form U. W. 3-A

Temp. Filing No. U. W. 2-5-231APPLICATION FOR PERMIT TO APPROPRIATE UNDERGROUND WATERS IN THE STATE OF
WYOMING

(Under Chapter 169, Session Laws of Wyoming, 1957)

PERMIT NO. U. W. 1923 NAME OF WELL Utility Area Deep Well #1
53-65-18bbd2
 WATER DIVISION NO. 2 UNDERGROUND WATER DISTRICT
Crook County
 I, William E. Fields of San Francisco
 County of San Francisco State of California
 being duly sworn according to law, upon my oath say:

- The name of the applicant is the United States of America, Department of the Interior,
National Park Service
- The postoffice address of the applicant Devils Tower National Monument
Devils Tower, Wyoming 82714
- The use to which the water is to be applied is: Irrigation (), Municipal (), Industrial (), Other
Domestic, Recreational, Fire Protection
- Name: Designate the well by name and number. Utility Area Deep Well #1
53-65-18bbd2
- The well is to be located in the NW ¼ NW ¼ of Section 18, T. 53 N., R. 65 W.,
 of the 6th P.M., Wyoming.
- The type of the proposed well is: Drilled (X), Dug (), Driven (), Jetted (), Other
- The estimated depth of the well is to be 1350 feet.
- The approximate depth to the water table below land surface is 1300 feet.
- The diameter of well at top is to be 6 inches, and at bottom 4½ inches.
 Approx. 820' - 6" I.D., 280' - 2½" I.D.
- The kind of casing (a) lbs. per ft. Unknown, (b) diameter 360' - 5" O.D., (c) new casing (X),
 used casing ().
- Type of pump, if any, Submersible Capacity of pump 55 Gal. Per Min.
 (Centrifugal, turbine, rotary, plunger)
- Type of power Electric motor Horsepower of engine or motor 5
 (Electric motor, steam or gasoline engine, etc.)
- Construction of well will begin within one year from date of approval of this application.
- Completion of the construction and completion of the application of water to the beneficial uses stated in this appli-
 cation will be made by December 31 of the second year after approval of this application.
- Estimated yield of water from proposed well 100 gallons per minute.
- Estimated cost of well and pumping equipment \$30,000 Dollars.
- The well is to be constructed on lands owned by: United States of America
Department of Interior, National Park Service
- The water is to be used on lands owned by: United States of America
Department of Interior, National Park Service

Permit No. U. W. 1923Page No. 68

19. If for irrigation, the land proposed to be irrigated should be described in the following tabulation.

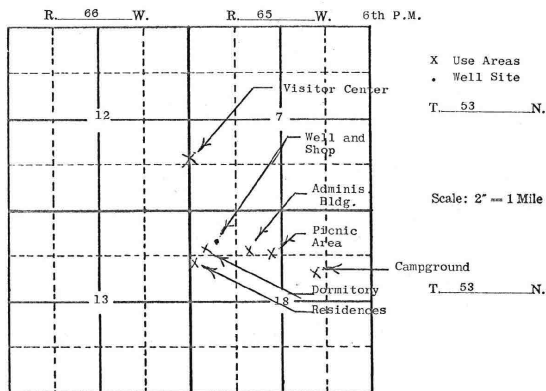
(Give irrigable acreage in each legal subdivision. If proposed use is for supplemental supply for lands with a right from another source, indicate in the tabulation the priority or Permit Number, the source of supply and the name of the ditch or other well.)

If not used for irrigation, state type, method and place of use.

Township	Range	Sec.	NE1/4				NW1/4				SW1/4				SE1/4				TOTALS
			NE1/4	NW1/4	SW1/4	SE1/4	NE1/4	NW1/4	SW1/4	SE1/4	NE1/4	NW1/4	SW1/4	SE1/4	NE1/4	NW1/4	SW1/4	SE1/4	
53N	65W	18								Well Site									
										~~NOT APPLICABLE~~									
53N	65W	7											X						
53N	65W	18			X		XX	X	X										
					X														
					X														

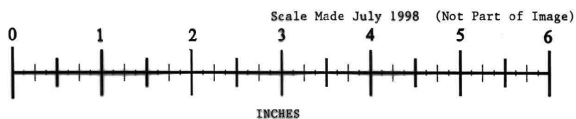
TOTAL NUMBER OF ACRES TO BE IRRIGATED _____

Locate well and acreage to be irrigated as accurately as possible on the following plat: If use is for purposes other than irrigation, show, in addition to well location, the point of use.



REMARKS: In addition to shop use at the well area, water will be used at a
 Visitor Center, 4 residences, Administration Building, Seasonal
 Dormitory, Picnic Area and Campground for Devils Tower National
 Monument.
 NOTHING HEREIN SHALL CONSTITUTE A WAIVER OF THIS OR ANY OTHER RIGHTS
 VESTED IN THE NAME OF THE UNITED STATES OF AMERICA.

(Signed) William E. Fields
 William E. Fields
 Acting Supervisory Hydraulic Engineer



CA 117002A-112
THE STATE OF WYOMING, }
City of San Francisco } ss.
County of San Francisco

I hereby certify that the foregoing application was signed in my presence and sworn to before me by William E. Fields, 1967
My Commission Expires 10/25, 1967
HARRY A. CANNON
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN San Francisco
City and County of San Francisco Notary Public.

THIS SECTION IS NOT TO BE FILLED IN BY APPLICANT

THE STATE OF WYOMING, }
STATE ENGINEER'S OFFICE } ss.

This instrument was received and filed for record on the 27th day of March, A. D. 1967, at 9:00 o'clock A. M.

Recorded in Book 11 of Underground Water Permits, on Page 68

THE STATE OF WYOMING, }
STATE ENGINEER'S OFFICE } ss.

THIS IS TO CERTIFY that I have examined the foregoing application and do hereby grant the same subject to the following limitations and conditions:

The right to be acquired under this permit shall not include the right to have the water level or artesian pressure at the point of diversion maintained at any level higher than that required for maximum beneficial use of available water in the source of supply.

If the well is a flowing artesian well it shall be so equipped that the flow may be shut off when not in use. Provision shall also be made for a threaded tap to which a pressure gage may be attached for determining shut-in pressure when desired.

This permit is granted subject to the condition that it shall not interfere with prior valid and existing rights to the use of the waters of said underground source, and use of water hereunder is subject to the further provisions of Chapter 169, Session Laws of Wyoming, 1957.

Construction of proposed work shall begin within one year from the date of approval.

The time for completing the work and completing the application of water to beneficial use shall terminate on December 31, 1969.

The amount of appropriation shall be limited to the quantity to which permittee is entitled as determined at time of proof of application of water to beneficial use.

Witness my hand this 9th day of June, A. D. 1967.

Permit No. U. W. 1923

Page No. 68

U. W. 1923
PERMIT NO. _____
PERMIT STATUS

Priority Date March 27, 1967

Approval Date June 9, 1967

NOTICE

This application must be accompanied by a filing fee of two dollars.

Section 7, Chapter 169, Session Laws of Wyoming, 1957, provides in part: "Any person who after March 1, 1958, intends to acquire the right to beneficial use of any underground water in the State of Wyoming, except for those purposes specifically exempted by provisions, of Section 2 shall, before commencing construction of any well or performing any work in connection with said construction or proposed appropriation or any manner utilizing said water for beneficial purposes, file with the State Engineer an application for a permit to make such appropriation and shall not proceed with any of such construction or work until a permit is granted by the State Engineer, provided, that whenever any well constructed for any other purpose shall be found to be suitable for the withdrawal of underground water, such application shall be filed before said water is utilized for beneficial use"

Final proof may be submitted in accordance with the provisions of Sections 7 and 12, Chapter 169, Session Laws of Wyoming, 1957, after which Certificate of Appropriation will be issued by the State Board of Control.

The granting of a permit does not constitute the granting of right of way. If any right of way is necessary in connection with this application it should be understood that this responsibility is the applicant's.

Docket Information

Number of Documents in Docket 13

Documents Dated from 8/21/1961 to 6/20/1967

Docket Compiled: 2/15/2011