



WATER-RIGHT DOCKET

Dinosaur National Monument

Docket No: 7

ANDERSON HOLE WELL

Preliminary Docket Information

00-00-0000: water right record park: dino docket number: federal #7

WATER RIGHT RECORD

Park: DINO

Docket Number:
Federal #7

IDENTIFICATION NO: DINO W 1 3 0 6 1 0 0 A F 0 7

DITCH/WATER SYSTEM: Anderson Hole Campground

SOURCE OF SUPPLY: Well

LOCATION: NW $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 13, T6N, R100W, 6PM

WATER RIGHT:

Appropriator: United States of America, National Park Service

Application/Permit Number: 12223

Certificate Record Number:

Date of Priority: July 17, 1962

Quantity of Water: 15 gpm

Purpose: Domestic

Irrigated Land Description:

SUMMARY OF STATUS: This is a Federal water right

Well Drilled from July 30, 1962 to August 3, 1962.

This well was filed with the State of Colorado as a reserved water right
In the Matter of the Application for Water Rights of the United States of
America in the District Court in and for Water Division No. 6 W-85 & W-86

State Water Rights Documentation

Form E (Rev.)
5-62

STATE OF COLORADO
DIVISION OF WATER RESOURCES
OFFICE OF THE STATE ENGINEER
GROUND WATER SECTION

Index No.
 IDWD
 Use
 Registered

LOG AND HISTORY OF WELLPERMIT NO. 12223

Driller Frederickson's Inc. Lic. No. 480
 Owner National Park Service
 Street 91 West Main City Vernal, Utah
 Tenant _____
 Use of Water Domestic
 On or By _____ No. _____
 (description of site or land) Acres _____
 Date Started July 30, 1962
 Date Completed August 3, 1962
 Yield 15 GPM or _____ CFS

WELL DESCRIPTION:

Depth to Water 13'2" ft. Total Depth 17 ft.
 (measured from ground surface)
 Hole Diameter { from 0 ft. to 12'9" ft., 6 1/4 in.
 from 12'9" ft. to 17' ft., 3 7/8 in.
 from _____ ft. to _____ ft., _____ in.

TEST DATA:

How Tested X Pump or _____ Bailed
 Date Tested August 3, 1962 Length 3 hrs.
 Rate 15 GPM Drawn Down 1'4" ft.

PUMP DATA:

Pump Type Hand Outlet Size 1 1/4 in.
 Driven by _____ HP _____

CASING RECORD:**Plain Casing**

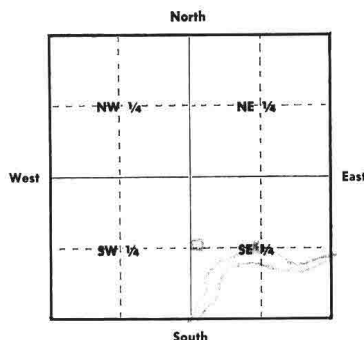
Size 4", Kind black from 0 ft. to 12'9" ft.
 Size _____, Kind _____ from _____ ft. to _____ ft.
 Size _____, Kind _____ from _____ ft. to _____ ft.

Perforated Casing

Size _____, Kind _____ from _____ ft. to _____ ft.
 Size _____, Kind _____ from _____ ft. to _____ ft.
 Size _____, Kind _____ from _____ ft. to _____ ft.

WELL LOCATION

Neffat County
NW 1/4 of SE 1/4 of Sect. 13 ✓
 Twp. 6N, Rge. 100W, 6 PM



ABOVE DIAGRAM REPRESENTS ONE FULL SECTION. LOCATE WELL ACCURATELY IN SMALL SQUARE REPRESENTING 40 ACRES.

or

If the above is not applicable fill in:

Anderson Hole along Yampa River
 No. _____ Street _____
Dinosaur National Monument-Colorado
 City or Town _____

or

Lot _____, Block _____
 _____ Subdivision
 (include filing or number)

TO BE MADE OUT IN QUADRUPLICATE:

Original Blue and Duplicate Green Copy must be filed with the State Engineer within 30 days after well is completed. White copy is for the Owner and Yellow copy for the Driller.

FOR WELL LOG USE REVERSE SIDE

WELL LOG

Form D (Rev.)
1/58STATE OF COLORADO
DIVISION OF WATER RESOURCES
OFFICE OF THE STATE ENGINEER, GROUND WATER SECTION

PERMIT TO USE GROUND WATER

This permit is issued to the applicant of the address shown below authorizing the use of ground water in the amount, for the use as indicated on/at the location given in the application, and as of the initiation date shown.

Form C (Rev.)

3-62/5M

STATE OF COLORADO
APPLICATION FOR USE OF GROUND WATER

(Use Indelible Pencil or Typewriter)

Applicant National Park ServiceP.O. Address 51 West Main, Vernal, Utah

Quantity applied for _____ gpm or _____ AF Storage

Used for Domestic PurposesAndersons holeon/at Dinosaur National Monument
(Legal description of land site)

Total acreage irrigated and other use _____

ESTIMATED DATA OF WELL

Hole size: 4 in. to 80 ft.
_____ in. to _____ ft.Casing Plain 4 in. from 30 to 40 ft.

_____ in. from _____ to _____ ft.

Open or Perf. 4 in. from 10 to 20 ft.

_____ in. from _____ to _____ ft.

PUMP _____ Outlet

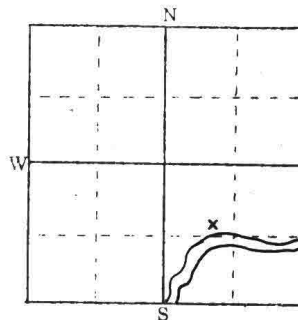
DATA: Type Hand HP 0 Size 1"Use initiation date _____ 19____
(Use Supplemental pages for additional data)Driller to furnish Log and History (Form E)
within 30 days after completion of well.

LOCATION OF WELL

County KoffatNW $\frac{1}{4}$ of SE $\frac{1}{4}$ of Sect. 13, Twp. 6N ✓Rge. 100 W, 6 P.M. OR

Street Address or Lot & Block No. _____

Town or Subdivision _____



Locate well in 40 acre (small) square as near as possible. Large square is one section.

\$25.00 fee required for uses other than Domestic or Livestock.

Applicant _____
Agent or _____
Driller _____ No. _____

Address _____

THIS APPLICATION APPROVED

PERMIT NO. 12223

ISSUED:

DATE JUL 17 1962

19____

NOTE — SATISFACTORY COMPLETION REQUIRED FOR APPROVAL OF APPLICATION

THE ABOVE APPLICATION, BEING A PART OF THIS PERMIT, IS APPROVED AS INDICATED.

SEAL

J. B. Whitton
STATE ENGINEER

By

She W. Colburn

IN THE DISTRICT COURT IN AND FOR

WATER DIVISION NO. 6

STATE OF COLORADO

CASE NO. W-

IN THE MATTER OF THE	)	
APPLICATION FOR WATER RIGHTS	)	APPLICATION FOR UNDERGROUND
OF THE UNITED STATES OF AMERICA	)	WATER RIGHT (WELL)
IN MOFFAT COUNTY	)	

1. Name of applicant: United States of America

Address of applicant: c/o Kenneth J. Burke
Department of Justice
Land and Natural Resources Division
P. O. Box 1656
Denver, Colorado 80201
2. Legal description of location of well: A point within the NW $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Section 13, T. 6 N, R. 100 W. of the 6th P. M., within the boundaries of Dinosaur National Monument as indicated on the attached map and known as Anderson Hole well.
3. Depth of well: 17 feet.
4. Date of initiation of appropriation: August 3, 1962.
5. Amount of water claimed in cubic feet per second of time: .033 c.f.s.
6. Proposed use of water: Public use (campground)
7. Permit No. 12223.
8. The United States seeks to antedate the adjudication dates of earlier decrees insofar as they, in conjunction with applicable statutes, appear or purport to preclude this court from awarding to the United States its water rights bearing their true priority dates.

Attorney for Applicant

Supporting Hydro Data

Form 10-174
(Rev. 8-56)UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

COMPLETION REPORT OF CONSTRUCTION PROJECT

REGION Midwest	AREA Dinosaur National Monument	COUNTY Moffat	STATE Colorado
PROJECT OR JOB TITLE Water Test Wells along the Yampa River Campsites		PCP NO. M-31 (Refer to)	
LOCATION IN AREA Echo Park and Deerlodge		MASTER PLAN NO.	BUILDING NO.
WORKING DRAWING NO. AND TITLE Anderson Hole, Harding Hole, Box Elder.			

APPROPRIATION TITLE AND SYMBOL 14-1035 (0343) Construction	WORK ORDER NO. DINO 2-WR-63B (1st Rev)
CONTRACT NO. 14-10-0232-700	DATE WORK STARTED August 2, 1962
NAME OF CONTRACTOR Frederickson's Inc., c/o G. B. Frederickson	DATE WORK COMPLETED September 21, 1962
ADDRESS Hutchinson, Minnesota	

COST ANALYSIS

CONSTRUCTION ITEMS	QTY.	UNIT COST IN PLACE	TOTAL COST IN PLACE
<u>Anderson Hole Well</u>			
Contract Costs		2,129.00	2,139.93
Misc. Costs		10.93	
<u>Harding Hole Well</u>			
Contract Costs		2,667.00	2,677.93
Misc. Costs		10.93	
<u>Echo Park Well</u>			
Contract Costs		4,124.00	4,134.93
Misc. Costs		10.93	
<u>Box Elder Well</u>			
Contract Costs		3,039.00	3,049.92
Misc. Costs		10.92	
<u>Deer Lodge Park Well</u>			
Contract Costs		1,495.00	
Test Pump		122.48	
(Detail continued on reverse side)		TOTAL	

SUMMARY OF EXPENDITURES

PERSONAL SERVICES	EQUIPMENT	MATERIALS AND SUPPLIES
OTHER		

CHANGE ORDERS

ORIGINAL CONTRACT AMOUNT	FIRST	SECOND	THIRD
FINAL CONTRACT AMOUNT	FOURTH	FIFTH	SIXTH

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

SUBMITTED BY (Name and title) (Sgd) Verne R. Bertsch Verne R. Bertsch, Ch. Pk. Rgr.	DATE November 30, 1962
APPROVED BY (Name and title) (Sgd) Earl M. Semingsen Earl M. Semingsen, Supt.	DATE December 3, 1962

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

Deer Lodge Park Well (Continued)

Misc. Costs

10.92

1,628.40

Total Cost

13,631.11

ANALYSES BY GEOLOGICAL SURVEY, UNITED STATES DEPARTMENT OF THE INTERIOR
(parts per million)

Salt Lake City Lab. number	25126				
Date of collection	8-5 1962				
Silica (SiO ₂)	10				
Iron (Fe), dissolved*					
Iron (Fe), total	.02				
Manganese (Mn), dissolved*					
Manganese (Mn), total					
Calcium (Ca)	53				
Magnesium (Mg)	10				
Sodium (Na)	) 22				
Potassium (K)					
Bicarbonate (HCO ₃)	200				
Carbonate (CO ₃)	0				
Sulfate (SO ₄)	42				
Chloride (Cl)	10				
Fluoride (F)	.2				
Nitrate (NO ₃)	.5				
Boron (B)					
Dissolved solids					
Sum					
Residue on evaporation					
at 180° C	237				
Hardness as CaCO ₃	174				
Non-carbonate	10				
Alkalinity as CaCO ₃	164				
Specific conductance					
(micromhos at 25° C)	422				
pH	7.6				
Color					
CO ₂ (calculated)					

*In solution at time of analysis.

25126 - Well (industrial), Anderson Hole, Moffat County, Colorado.
Depth: 17'. Diam: 8". WL: 13.2'. Yield: 15 gpm. Mostly clear.
Poc: at well. Cased to: 12'. Drilled: Aug. 5, 1962. Owner:
National Park Service, Dinosaur National Monument. Collected by:
A. Fredrickson, well drilling contractor. River campground
development.

Other Supporting Information

N A R R A T I V EANDERSON HOLE WELL

1. Started drilling July 30, 1962
Finished drilling and pump testing on August 3, 1962

2. Total Cost for Drilling Well

17 ft. hole, drilling	\$ 680.00
16 ft. 9 in. casing	34.00
Grouting top of casing	95.00
Boiling and testing, 11 hours	220.00
Moving equipment	<u>1,100.00</u>
Total Cost	\$2,129.00

3. Drilling Log

The drillers encountered a red shale from 0 to 5 feet; a red and brown sandy shale was encountered from 5 feet to 7 feet; red and white boulders were encountered from 7 feet to 12 feet; from 12 feet to 15 feet the driller encountered limestone and chert of the red and white variety. Sand and shale, brown and red in color, were encountered at 15 feet to 16 feet, and the final foot between 16 feet and 17 feet was a hard lime.

4. Difficulties Encountered

Drilling operations were started on July 30, 1962, when a depth of 9 feet was reached. At this time the drillers were drilling in a solid limestone boulder. When no progress was being made they moved to another site on July 31, 1962. The second hole was started and they again reached 9 feet and hit the same limestone boulder. On August 1 the hole had been drilled to 13 feet. No progress could be made with the small rig being used so they moved to the third hole on August 2, 1962. By 4:00 P.M. of August 2, 1962, they reached a depth of 17 feet and started the test pump.

5. Physical Dimensions

Depth of hole - 17 feet
Size of hole - 4 inches
16 feet, 9 inches of 4 inch I.D. black steel pipe casing

6. Test Pump Data

August 2, 1962 - pumped well for 8 hours from 4:00 P.M. to
Midnight at 15 GPM
August 3, 1962 - pumped for 3 hours from 7:00 A.M. to 10:00 A.M.
Water was clear with no sand.
Static water level - 13 feet 2 inches
Water level - 14 feet 6 inches

7. Equipment Used

A small portable rotary drill was used to drill this well. The unit was operated by an air cooled Wisconsin engine. An "A" frame of pipe was used for a mast. See attached photos.

Equipment was moved from one well site to another by rubber rafts. The move from Deer Lodge to Anderson Hole took less than half a day. The water in the Yampa River had dropped considerably, which posed a problem in getting the loaded boats down river. In several places they hung up on rocks. Had the drilling been done at an earlier date, when the water was up, there would have been no difficulty in moving from one site to another.

8. Drilling Progress Each Day

July 30, 1962 - part of day drilled 9 feet
July 31, 1962 - drilled until noon; no progress; abandoned hole and started a new one; drilled to 9 feet by end of day.
August 1, 1962 - drilled an additional 4 feet in the second hole to a depth of 13 feet. Could make no progress beyond 13 feet because of large boulders.
August 2, 1962 - second hole abandoned and plugged; third hole started; drilled to a depth of 17 feet; found water at this point and drilling was stopped.

9. Grouting

A surface seal of concrete to a depth of 8 feet and 6 inches thick was poured around the 4 inch casing.

10. Quality of Water Supply

See attached sheet, an analysis by Geological Survey, United States Department of the Interior, Ground Water Branch, Room 125, 231 East 4th South, Salt Lake City, Utah.

Refer to RFP H-31, Well Development. Hand pumps will be used
at this well.

Submitted by: *Carl R. Butch*
Carl R. Butch, Chief Park Ranger

Approved by: *Karl H. Sonington*
Karl H. Sonington, Superintendent

Dinosaur National Monument
Vernal, Utah

154

January 31, 1963

Office of the State Engineer
232 State Service Building
1525 Sherman Street
Denver 3, Colorado

Attention: George W. Colburn

Gentlemen:

Thank you for your letter of January 22, 1963 in which you pointed out discrepancies between the permit forms, the log and history forms, and plotted map locations. We have checked our locations and find that some errors were made on our original permits and some errors made on the log and history form. Listed below are the correct locations of the wells on the Yampa River in Dinosaur National Monument.

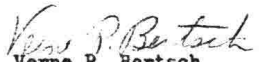
- # 7 No. 12223 - Andersons Hole; NW $\frac{1}{4}$ of SE $\frac{1}{4}$ of Sec. 13, T6N, R100W, 6PM
No. 12224 - Deerlodge; SW $\frac{1}{4}$ of SE $\frac{1}{4}$ of Sec. 21, T6N, R99W, 6PM
No. 12225 - Hardings Hole; NE $\frac{1}{4}$ of NW $\frac{1}{4}$ of Sec. 22, T6N, R102W, 6PM
No. 12226 - Box Elder; NE $\frac{1}{4}$ of NW $\frac{1}{4}$ of Sec. 34, T7N, R103W, 6PM
No. 12227 - Echo Park; SW $\frac{1}{4}$ of SW $\frac{1}{4}$ of Sec. 28, T7N, R103W, 6PM

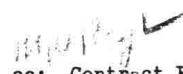
On the Log and History Form, under pump data, it was indicated that 2 HP gas engine centrifugal pumps were being used. This gas engine pump was used for test pumping only. We will install hand pumps on each of these wells with a 1 $\frac{1}{2}$ inch outlet.

We are sorry for the discrepancies and hope this will clear up the matter. If we can be of further assistance please do not hesitate to call on us.

Thank you for your cooperation.

Sincerely yours,


Verne R. Bertsch
Acting Superintendent


cc: Contract File

Docket Information

Number of Documents in Docket 13
Documents Dated from 12/3/1962 to 1/31/1963
Docket Compiled: 3/9/2011