



WATER-RIGHT DOCKET

Dinosaur National Monument

Docket No: 9

BOX ELDER WELL

Preliminary Docket Information

00-00-0000: water right record park: dino docket number: federal #9

WATER RIGHT RECORD

Park: DINO

Docket Number:
Federal #9

IDENTIFICATION NO: DINO, W, 3 4, 0 7, 1 0, 3 A, F, 0 9,

DITCH/WATER SYSTEM: Box Elder Campground

SOURCE OF SUPPLY: Well

LOCATION: NE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 34, T7N, R103W, 6PM

WATER RIGHT:

Appropriator: United States of America, National Park Service

Application/Permit Number: 12226

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 consisting of a well and hand pump.

Well started August 18, 1962 and completed August 27, 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. 12226

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. _____ Acres _____
 (description of site or land)
 Date Started August 15, 19 62
 Date Completed August 27, 19 62
 Yield 20 GPM or _____ CFS

WELL DESCRIPTION:

Depth to Water 17'8" ft. Total Depth 46 ft.
 (measured from ground surface)
 Hole Diameter { from 0 ft. to 46 ft., 8 1/4 in.
 from _____ ft. to _____ ft., _____ in.
 from _____ ft. to _____ ft., _____ in.

TEST DATA:

How Tested X Pump or _____ Bailed
 Date Tested Aug. 26, 19 62 Length 11 hrs.
 Rate 20 GPM Drawn Down _____ ft.

PUMP DATA:

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

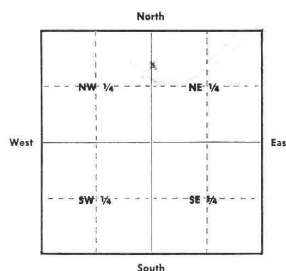
CASING RECORD:

Plain Casing
 Size 4 1/2 OD Kind Black from 0 ft. to 29 ft.
 Size _____, Kind _____ from _____ ft. to _____ ft.
 Size _____, Kind _____ from _____ ft. to _____ ft.

Perforated Casing
 Size 4 1/2 OD Kind black from 29 ft. to 46 ft.
 Size _____, Kind _____ from _____ ft. to _____ ft.
 Size _____, Kind _____ from _____ ft. to _____ ft.

WELL LOCATION

Hoffat County
NE 1/4 of NW 1/4 of Sect. 34
 Twp. 7N, Rge. 103W, 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:

Box Elder 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

Dated _____, 19____

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.)

STATE OF COLORADO

3-62/5M

APPLICATION FOR USE OF GROUND WATER

(Use Indelible Pencil or Typewriter)

Applicant National Park ServiceP.O. Address 91 West Main, Vernal, UtahQuantity applied for _____ gpm or
_____ AF StorageUsed for Domestic Purposeson/at Box Elder
Dinosaur National Monument
(legal description of land site)

Total acreage irrigated and other uses.

ESTIMATED DATA OF WELL

Hole size: 4 in. to 50 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

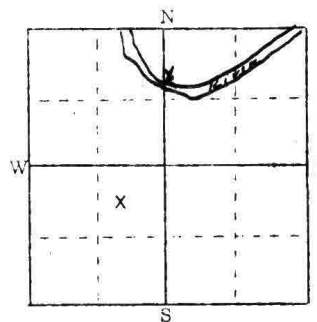
DATA: Type Hand HP 0 Size 1"Use initiation date 19
(Use Supplemental pages for additional data)Driller to furnish Log and History (Form E)
within 30 days after completion of well.

LOCATION OF WELL

County MoffatNE $\frac{1}{4}$ of NW $\frac{1}{4}$ of Sect. 34 Twp. 7NRge. 103 W 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 _____

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

Geo W. Colburn
Authorized Agent

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)
FOR 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 NE $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 34, Township 7 N., R. 103 W., of the 6th P.M., within the boundaries of Dinosaur National Monument as indicated on the attached map, and known as Box Elder Well.

3. Depth of well: 96 feet.

4. Date of initiation of appropriation: August 27, 1962.

5. Amount of water claimed in cubic feet per second of time: .033 c.f.s.

6. Proposed use of water: Public use and fire protection.

7. Permit No. 12226.

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 <u>Midwest</u>	AREA <u>Dinosaur National Monument</u>	COUNTY <u>Moffat</u>	STATE <u>Colorado</u>
PROJECT OR JOB TITLE <u>Water Test Wells along the Yampa River Campsites</u>			PCP NO. <u>M-31 (Refer to)</u>
LOCATION IN AREA <u>Echo Park and Deerlodge</u>		MASTER PLAN NO.	BUILDING NO.
WORKING DRAWING NO. AND TITLE <u>Anderson Hole, Harding Hole, Box Elder.</u>			
APPROPRIATION TITLE AND SYMBOL <u>14X1035 (0343) Construction</u>			WORK ORDER NO. <u>DINO 2-WR-63B (1st Rev)</u>
CONTRACT NO. <u>14-10-0232-700</u>		DATE WORK STARTED <u>August 2, 1962</u>	DATE WORK COMPLETED <u>September 21, 1962</u>
NAME OF CONTRACTOR <u>Frederickson's Inc., % G. B. Frederickson</u>		ADDRESS <u>Hutchinson, Minnesota</u>	

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	
<u>Grand Total</u> (Detail continued on reverse side)		TOTAL	13,937.11

SUMMARY OF EXPENDITURES

PERSONAL SERVICES <u>None</u>	EQUIPMENT <u>None</u>	MATERIALS AND SUPPLIES <u>13,937.11</u>
<u>Deer Lodge Park Well (continued)</u>		

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

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

38105

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

Salt Lake City Lab. Number	25227				
Date of collection	8-27-62				
Silica (SiO ₂)	11				
Iron (Fe), dissolved*	.01				
Iron (Fe), total					
Manganese (Mn), dissolved*					
Manganese (Mn), total	.30				
Calcium (Ca)	64				
Magnesium (Mg)	15				
Sodium (Na)	)				
Potassium (K)	) 59				
Bicarbonate (HCO ₃)	214				
Carbonate (CO ₃)	0				
Sulfate (SO ₄)	102				
Chloride (Cl)	48				
Fluoride (F)					
Nitrate (NO ₃)	.2				
Boron (B)					
Dissolved solids					
Sum					
Residue on evaporation					
at 180° C	396				
Hardness as CaCO ₃	220				
Non-carbonate	45				
Alkalinity as CaCO ₃	176				
Specific conductance					
(micromhos at 25° C)	666				
pH	7.9				
Color					
CO ₂ (calculated)					

*In solution at time of analysis.

25227 - Box Elder Well (B-6-103)27, Dinosaur National Monument,
Moffat County, Colorado. Depth: 46'. Diam: 4". Wl: 17.8'.
Yield: 22 gpm. (Industrial) Test well for proposed campground.
Poc: at well. Drilled: Aug. 27, 1962. Owner: National Park Service.
Clear. Collected by: Robert Jeffery.

Other Supporting Information

N A R R A T I V EBOX ELDER WELL

1. Started drilling August 18, 1962
Finished well August 27, 1962

2. Total Cost for Drilling Well

30 ft. hole	\$1,200.00
4 hours drilling (16 ft.)	38.00
48 ft., 4 inch casing	26.00
16 ft., 4 inch perforated casing	30.00
Grouting	25.00
Bailing and testing, 12 hours	250.00
3 hours standby	120.00
Moving equipment	<u>1,100.00</u>
Total Cost	\$3,039.00

3. Drilling Log

Fine sand, gray	0-5 feet
Dirty sand, gray	5-17 feet
Coarse sand and gravel, some boulders	17-46 feet

4. Difficulties Encountered

No difficulties experienced in drilling; however, the rotary cable on the drilling rig broke, which caused a delay of 3½ days in drilling.

5. Physical Dimensions

Depth of well	46 feet
Size of hole	4 inches
48 feet of casing including 16 feet of perforated casing	

6. Test Pumping Data

August 26, 1962, pumped well at 15 GPM for 7 hours	
August 27, 1962, pumped well at 20 GPM for 4 hours, water clear	
Static water level	17 feet 3 inches
Pumping level	20 feet

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 Harding Hole to Box Elder took 2 days. 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 and sand bars. 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

August 18	drilled 13 feet
August 19	drilled to 16 feet, broke rotary table, shut down for repairs
August 20	No work
August 21	No work
August 22	No work
August 23	drilled to 28 feet
August 24	drilled to 46 feet

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, all analyses by Geological Survey, United States Department of the Interior, Ground Water Branch, Room 125, 231 East 4th South, Salt Lake City, Utah.

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

Submitted by:

Vernon A. Bortach, Chief Park Ranger

Approved by:

Earl H. Samuelsen, Superintendent

Dinosaur National Monument
Vernal, Utah

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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.

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

4 9 No. 12226 - Box Elder; NE $\frac{1}{4}$ of NW $\frac{1}{4}$ of Sec. 34, T7N, R103W, 6PM

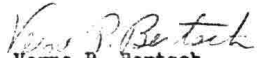
No. 12227 - Echo Park; SW $\frac{1}{4}$ of SW $\frac{1}{4}$ of Sec. 28, T7N, R103W, 6PM

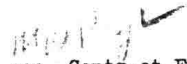
On the Log and History Form, under pump data, it was indicated that 2 HP gas engine centrifugal pumps were being used. This gas engine pump was used for test pumping only. We will install hand pumps on each of these wells with a 1 $\frac{1}{2}$ inch outlet.

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.

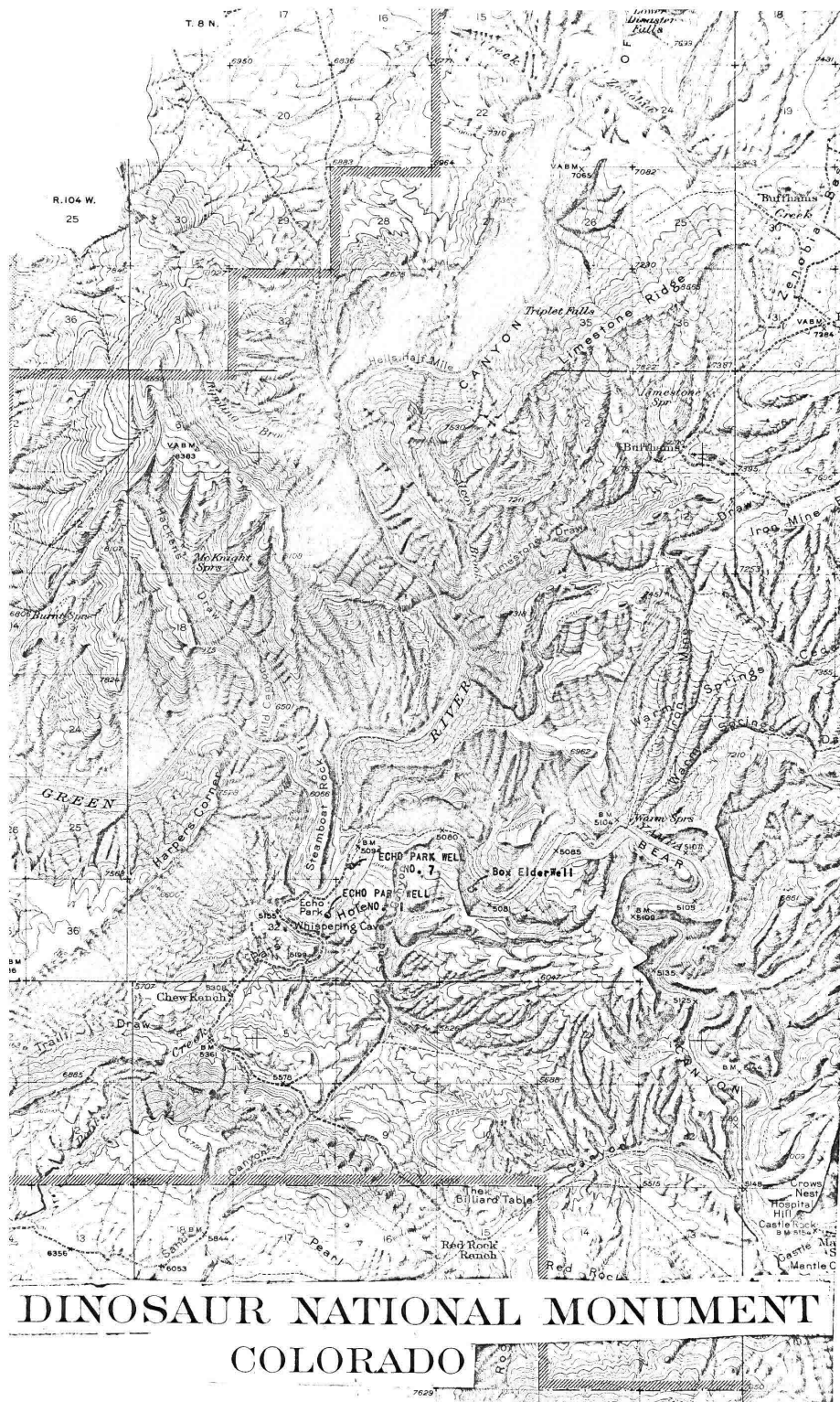
Thank you for your cooperation.

Sincerely yours,


Verne R. Bertsch
Acting Superintendent


cc: Contract File

Maps and Miscellaneous Information



Docket Information

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