



WATER-RIGHT DOCKET

Dinosaur National Monument

Docket No: 23

ECHO PARK WELL #2

Preliminary Docket Information

00-00-0000: water right record echo park

WATER RIGHT RECORD

Park: DINO

Docket Number:
Federal #23

IDENTIFICATION NO: DINO, W, 28, 07, 10, 3 B F, 23,

DITCH/WATER SYSTEM: Echo Park

SOURCE OF SUPPLY: Well #2

LOCATION: SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 28, T7N, R103W, 6th PM

WATER RIGHT:

Appropriator: United States of America, National Park Service

Application/Permit Number: Permit to use ground water #12227

Certificate Record Number:

Date of Priority: July 17, 1962

Quantity of Water:

Purpose: Domestic

Irrigated Land Description:

SUMMARY OF STATUS: This is a Federal water right consisting of a well, pump and distribution system.

Well Started August 28, 1962.

Well completed September 18, 1962.

Correspondence pertaining to this well contained in Docket #3.

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

DOCKET INFORMATION SHEET

Docket Identity	DIND W 28 1971 1103 B F 23
Region	ROCKY MOUNTAIN
Area	DINOSAUR NATIONAL MONUMENT
Site	ETCHO PARK
State	COLORADO
County	MOFFAT
Docket	DIND WATER RIGHT DOCKET 23
Location	T1M R103W SEC 28 SW1/4 SW1/4
Acquired by	APPROPRIATION
Application	6-185 AND 6-196
Permit	12287 JULY 17 1962
Certificate	
Priority	
Reservation	OCT 4 1915
Status	ACTIVE FEDERAL
Source	GROUND WATER
Use	DOMESTIC
Quantity	
Hydrologic Unit	14060001
Remarks	FEDERAL RIGHT CONSISTING OF A WELL PUMP AND DISTRIBUTION SYSTEM APPLICATION FILED IN WATER DIVISION 6 AS A RESERVED WATER RIGHT

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. **12227**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

Date Started **August 28**, 19 **62**Date Completed **September 18**, 19 **62**Yield **12** GPM or CFS**WELL DESCRIPTION:**Depth to Water **15' 9"** ft. Total Depth **38** ft.

(measured from ground surface)

Hole Diameter { from **0** ft. to **42** ft., **6 1/4** in.
 from **42** ft. to **38** ft., **3 7/8** in.
 from ft. to ft., ... in.

TEST DATA:How Tested **X Hand** Pump or **1 1/4** BailedDate Tested **Sept. 19**, 19 **62** Length **8** hrs.Rate **12** GPM Drawn Down **7' 9"** 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 **25' 1"** ft.

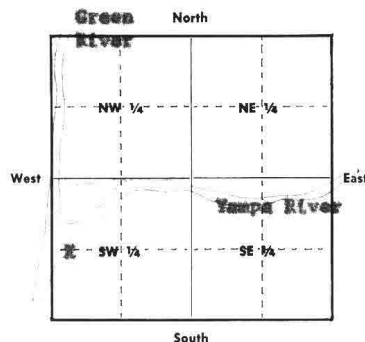
Size Kind from ft. to ft.

Size Kind from ft. to ft.

Perforated CasingSize **4 1/2 OD** Kind **black** from **25' 1"** ft. to **42** ft.

Size Kind from ft. to ft.

Size Kind from ft. to ft.

WELL LOCATION**Moffat** County**SW** 1/4 of **SW** 1/4 of Sect. **28** ✓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:

Echo Park **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

Form D (Rev.)
1/58

STATE 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.

WELL # 2

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 Purposes
Echo Park
on/at Dinosaur National Monument
(legal description of land site)

Total acreage irrigated and other rta.

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 10Use initiation date 19 _____
(Use Supplemental pages for additional data)

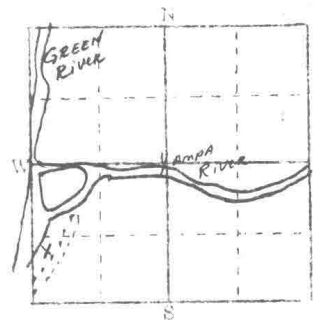
Driller to furnish log and history (Form E) within 30 days after completion of well.

LOCATION OF WELL

County GarfieldSW $\frac{1}{4}$ of SW $\frac{1}{4}$ of Sect. 28, Twp. 7 N.,Rge. 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. Witter
STATE ENGINEER
By *Sho W. Williams*
Authorized Agent

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 Composite		PCP NO.	M-31 (Refer to)
LOCATION IN AREA Echo Park and Deer Lodge		MASTER PLAN NO.	
WORKING DRAWING NO. AND TITLE Anderson Hole, Harding Hole, Box Elder.		BUILDING NO.	
APPROPRIATION TITLE AND SYMBOL 14-1035 (0343) Construction		WORK ORDER NO. WFO 2-42-613 (1st Rev)	
CONTRACT NO. 14-10-0232-700	DATE WORK STARTED August 2, 1962	DATE WORK COMPLETED September 21, 1962	
NAME OF CONTRACTOR Frederickson's Inc., & G. B. Frederickson	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 None	EQUIPMENT None	MATERIALS AND SUPPLIES None
OTHER None		

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)

<u>Deer Lodge Park Well (Continued)</u>		
Misc. Costs	<u>10.92</u>	<u>1,628.40</u>
Total Cost		<u><u>13,631.11</u></u>

Other Supporting Information

September 7, 1971

154-CSW

Memorandum

To: Director, Western Service Center
Attention: Mr. Gerard S. Witucki

From: Chief, Division of Water Resources

Subject: Echo Park Overlook test well, Dinosaur

A water right docket should be assembled to document the subject test well which was successfully completed in July 1970. All pertinent well and water system data should be included therein.

(Signed)

Manuel Morris

cc:
Director, Midwest Region (2)
WSC - EP&D

INITIAL AND DATE	
Director, MWR	
Director's Secretary	
Assoc. Dir., MWR	
Operations Eval.	
Coop. Programs	
✓ Park Opns. & Sup.	9/10
Admin. Mgmt.	
Personnel	
<i>[Signature]</i>	
<i>[Signature]</i>	
<i>[Signature]</i>	
Action taken & date	
<i>[Signature]</i>	

9/10

C.C. HANDED TO	
<i>done by stamp</i>	
BY <i>js</i>	DATE 9/10

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

Salt Lake City Lab. No.	25370				
Date of collection	9-18 1962				
Silica (SiO ₂)	10				
Iron (Fe), dissolved*					
Iron (Fe), total	1.3				
Manganese (Mn), dissolved*					
Manganese (Mn), total	.03				
Calcium (Ca)	51				
Magnesium (Mg)	26				
Sodium (Na)	24				
Potassium (K)					
Bicarbonate (HCO ₃)	215				
Carbonate (CO ₃)	0				
Sulfate (SO ₄)	83				
Chloride (Cl)	14				
Fluoride (F)	.5				
Nitrate (NO ₃)	3.0				
Boron (B)					
Dissolved solids					
Sum					
Residue on evaporation					
at 180° C	317				
Hardness as CaCO ₃	233				
Non-carbonate	57				
Alkalinity as CaCO ₃	176				
Specific conductance					
(micromhos at 25° C)	530				
pH	7.8				
Color					
CO ₂ (calculated)					

*In solution at time of analysis.

25370 - Drilled Well #4, T7N R103W, Sec.31, Echo Park, Moffat County, Colorado. Depth: 57.5'. Diam: 4". WBF: Weber SS gravel bed. WL: 15' 9". Yield: 7 GPM. Clear. Cased to: 42'. Drilled: Sept. 16, 1962. Poc: pump discharge. Owner: NPS. Test well for River Campground National Park Service. Use: Industrial. Collected by: Paul Ellis.

N A R R A T I V EECHE PARK WELL

1. Started drilling August 28, 1962
Finished drilling and pump testing September 13, 1962

2. Total Cost For Drilling Well

30 ft. drilling @ 40.00	\$1,200.00
50 hrs. drilling (27 ft.)	1,100.00
42 ft. casing @ 2.00	84.00
17 ft. perforated casing	85.00
Grouting	95.00
Drilling and testing, 20 hrs.	400.00
Standby, 4 hrs.	60.00
Moving equipment	<u>1,100.00</u>
Total	\$4,124.00

3. Drilling Log

Fine sand, gray	0-18 feet
Coarse sand, red, brown	18-23 feet
Boulders, red, gray	23-38 feet
Weber sandstone, buff, white	38-58 feet

4. Difficulties Encountered

The 15 feet of boulders caused some difficulties because the drilling rig was not heavy enough to make much progress.

5. Physical Dimensions

Depth of well	46 feet
Size of hole	4 inches
42 feet of casing, including 16 feet 11 inches of perforated casing.	

6. Test Pumping Data

The well was pump tested for 20 hours. The well was pumped at 12 GPM. Draw down was 23 feet 6 inches, and the static water level was 15 feet 9 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"

8. Drilling Progress

August 28 - drilled to 22 feet
August 29 - drilled to 23 feet
August 30 - drilled to 24 feet
Equipment broke down
August 31 - No drilling
September 1 - drilled to 26 feet
Worked on rig
September 2 - No progress - equipment broke down at noon
September 3 - no drilling
September 4 - no drilling
September 5 - no drilling
September 6 - no drilling
September 7 - no drilling
September 8 - no drilling
September 9 - fished tools out of hole
September 10 - drilled to 28 feet
September 11 - drilled to 30 feet
September 12 - drilled to 35 feet
September 13 - drilled to 40 feet
September 14 - drilled to 46 feet
September 15 - drilled to 52 feet
September 16 - drilled to 58 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

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

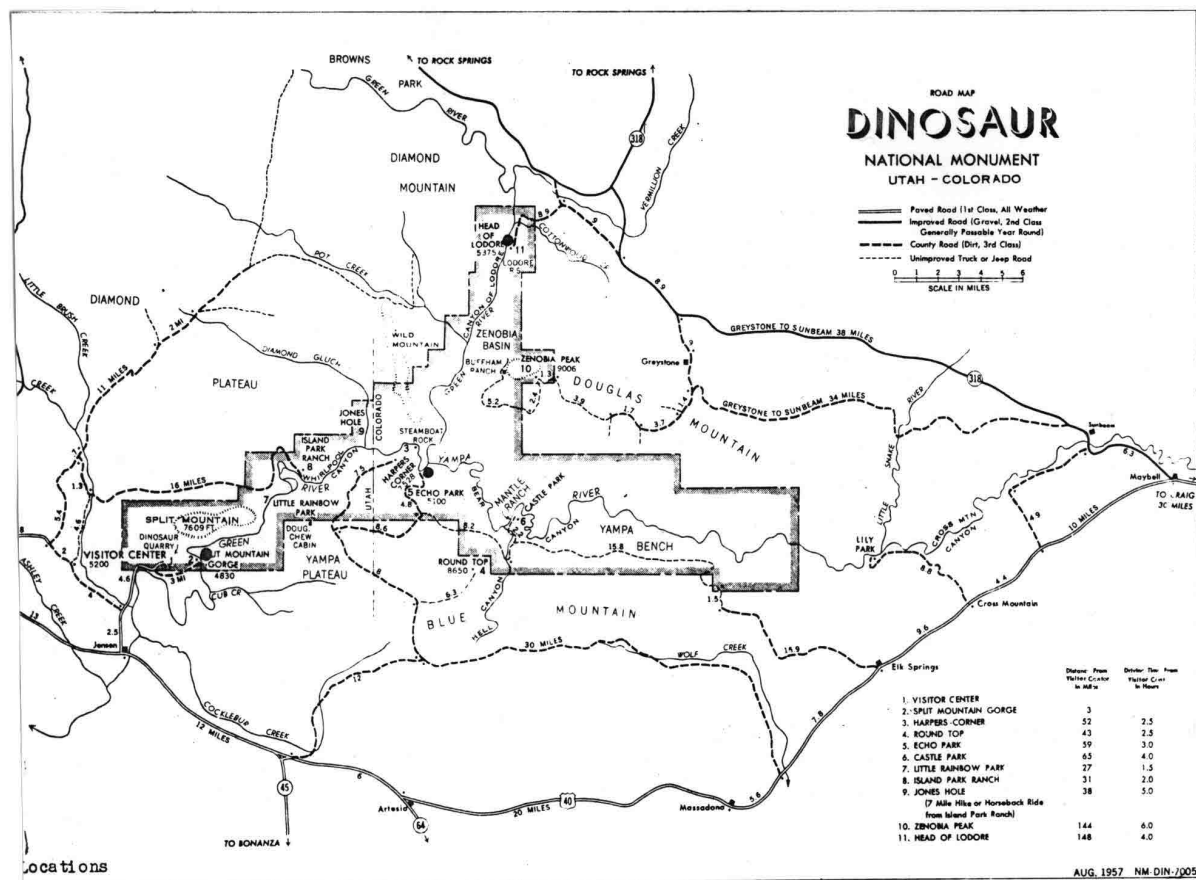
Refer to FGP M-31, Well Development. Hand pumps will be used at this well.

Submitted by:

Verna E. Bertsch, Chief Park Ranger

Approved by:

Earl H. Semington, Superintendent



Docket Information

Number of Documents in Docket 12

Documents Dated from 12/3/1962 to 9/7/1971

Docket Compiled: 3/9/2011