WATER-RIGHT DOCKET

Dinosaur National Monument

Docket No: 1

SUBSURFACE FLOW OF GREEN RIVER WELL.

Preliminary Docket Information

00-00-0000: water right record ditch/water system: quarry headquarters water system

WATER RIGHT RECORD

Park: DINO

Docket Number:
Federal #1

IDENTIFICATION NO: DINO, W, 3 5 0 4 2 3 A, F 0 1,

DITCH/WATER SYSTEM: Quarry Headquarters Water System

SOURCE OF SUPPLY: Subsurface flow of Green River - Well

LOCATION: S27°52'40"E 1038.93 from the NW Cor. Se. 35, T4S, R23E, SLM.

WATER RIGHT:

Appropriator: United States of America, National Park Service

Application/Permit Number: 29871

Certificate Record Number:

Date of Priority: April 25, 1958

Quantity of Water: 0.111 c.f.s.

Purpose: Miscellaneous

Irrigated Land Description:

SUMMARY OF STATUS: This is a Federal water right consisting of a well, pump, pipe, 50,000 gallon reservoir and distribution system.

Application to Appropriate Water #29871 made on April 25, 1958. Application approved July 18, 1960. On May 15, 1962, filed Water Users Claim.

Headquarters now using water from Jensen Water System. (Quarry)

The spring area water system now found in Docket #22.

State Water Rights Documentation

THE STATE OF UTAH

OFFICE OF STATE ENGINEER

SALT LAKE CITY

WAYNE D. CRIDDLE
STATE ENGINEER



September 12, 1963

Action	Employee	Hours	Initials
	Supt.		
	Adm.A.		
	For.		
	CP Rgr		
	GR. DR.		
	YA. DR.		
	CP Nat.		
	Asst. Nat.		
	Mus. Geo.		
X	Engr.		
	Sup. C[illegible]		
	Safety		
	Constr.		
	WODC Engr.		

Dinosaur National Monument
c/o Earl M. Semingsen
P. O. Box 101
Artesia, Colorado

Dear Sir:

RE: APPLICATION NO. 29871

We appreciate your immediate response to our request for a copy of the Election to File Water Users Claim on the above numbered application. We regret that we lost the original election form filed by you and that notice of lapsing was sent to you. A copy of the election you forwarded to us will be placed on the file of the application and it will remain in good standing in our office.

Please disregard the notice of lapsing.

If we can be of any assistance to you on matters pertaining to your filings, please write or call this office.

Yours truly,

Donald G. Stewart

Donald G. Stewart
APPROPRIATIONS ENGINEER

DGS:sb

W O D C
AUG 26 1963
CHF
ADM
PERS
P & P
ARCH
ENGR
L. A.
SPEC
CONT
SFTY
HABS
ACTION TAKEN - DATE

L54 DINO

AUG 21 1963

Memorandum

To: The Director

From: Acting Assistant Regional Director, Midwest Region

Subject: Water Right Application No. 29871, Quarry Area, Dinosaur National Monument

Mr. Reed enclosed with his August 7 memorandum a "Notice of Lapsing" from the State Engineer, State of Utah, of the subject application.

Subsequent to receipt of Mr. Reed's memorandum, we researched our earlier correspondence and found that Superintendent Semingsen had filed with the State Engineer a Water Users Claim dated May 15, 1962. We got in touch with the State Engineer calling his attention to this earlier filing of the Water Users Claim and he advised that he would review their records and discuss with his department any further action which we need to take for completion of the subject application. He will advise either the Superintendent or this office if they decide further action is necessary on our part.

Enclosed for your information is a copy of, State Engineer's Petition and the Order signed by Judge Maurice Harding, which is the authority for using the Water Users Claim instead of the proof of application; Superintendent Semingsen's May 15, 1962 memorandum to Regional Director, Midwest Region and his May 15, 1962 letter to State Engineer of Utah, with Water Users Claim of Application No. 29871.

(Sgd) Harry B. Robinson

Acting Assistant Regional Director

Enclosures (5)

cc: Superintendent, Dinosaur
Chief, WODC - w/enclosures

08-20-1963: letter to donald g. stewart regarding application no. 29871 election to file water users claim

L54 Dino

Dinosaur National Monument
Box 101, Artesia, Colorado

August 20, 1963

Reg. Director
Admin. Asst.
Asst. to R. D.
Admin.
Cons-Int-Use
Res. Planning
Prog. Coord.
Info. & Publs.
Field Solic.
Action Taken
File

State Engineer's Office
442 State Capitol
Salt Lake City 14, Utah

Attention: Mr. Donald G. Stewart

Re: Application No. 29871

Dear Mr. Stewart:

In accordance with our telephone conversation this morning, we are attaching a photo copy of "Election to File Water Users Claim" with regards to Application No. 29871. A photocopy of our transmittal letter dated May 15, 1962 and your letter of April 26, 1962 are also attached. We hope this provides the necessary proof of appropriation.

Sincerely yours,

Earl M. Semingsen

Earl M. Semingsen

Attachment

cc: Reg. Dir., MW Reg. w/attachment

L54 Dino

ROUTE TO ~~Acting SP~~
~~Bob~~ 8/21
File

REPORT ON TELEPHONE CALL AUGUST 19, 1963

To: Earl Semingsen, Superintendent, Dinsoaur National Monument

From: William A. Mott, Hydraulic Engineer

Subject: Water Right Application #29871, Quary Area, Dinosaur

Upon research of past correspondence it was found that Superintendent Semingsen had filed with the State Engineer, a Form of Water Users Claim on May 15, 1962. Superintendent was requested to get in touch with the State Engineer and ascertain the status of the water users claim filed May 15, 1962 and prior to the date of June 30, 1962 as stated in the "Notice of Lapsing."

Superintendent advised that Mr. Gallagher who is most familiar with the water right files in Dinosaur was not available and he requested that this office get in touch with the State Engineer and determine the status of the water users claim filed May 15, 1962. This office concurred and will advise the Superintendent of our finding.

William A Mott

William A. Mott
Hydraulic Engineer

L54 Dino

ROUTE TO Action 8/20
Bob 8/21
File

REPORT ON TELEPHONE CALL AUGUST 19, 1963

To: Wayne D. Criddle, State Engineer, State of Utah, Salt Lake City, Utah

From: William A. Mott, Hydraulic Engineer

Subject: Water Users Claim Relative to Application #29871, Quary Area, Dinosaur National Monument

Mr. Criddle was advised that the Superintendent had filed a Water Users Claim May 15 and was questioned as to the procedure that followed after filing the Water Users Claim. He advised that the Water Users Claim is placed on the books and submitted to the court for review. After filing notices to other water users and there being no complaints, the water right application is adjudicated and creates a permanent water right.

Mr. Criddle will research their files for the water users claim which we have filed and if any further action is necessary pertaining to Application #29871, he will advise either the Superintendent of Dinosaur or this office.

William A Mott

William A. Mott
Hydraulic Engineer

L54 Dino

ROUTE TO

REPORT ON TELEPHONE CALL AUGUST 16, 1963

To: Wayne D. Criddle, State Engineer, State of Utah, Salt Lake City, Utah

From: William A. Mott, Hydraulic Engineer

Subject: Use of Water Users Claim Relative to Water Right Application #29871, Quary Area, Dinosaur National Monument

A "Notice of Lapsing" of the subject application dated July 30, 1963 was enclosed with Mr. Reed's memorandum of August 7 relative to lapsed date of June 30, 1962. The "Notice of Lapsing" states the application may be reinstated upon proper showing within sixty days after "Notice of Lapsing" (July 30, 1963) and the payment of the fees and/or submitting proof.

Mr. Criddle was asked if we could submit an Election to Submit A Water Users Claim in Lieu of Filing a Proof of Appropriation. He concurred such action would be permissible; however, he was not personally acquainted with the file on Application #29871. It was concurred that we would submit a water users claim.

William A Mott

William A. Mott
Hydraulic Engineer

08-14-1963: letter to wayne d. criddle regarding submittance of proof of beneficial use of a ground water supply

Mott 8/14

L54 Dino

AUG 14 1963

Wayne D. Criddle, State Engineer
State of Utah
Salt Lake City, Utah

Dear Mr. Criddle:

We wish to submit proof of beneficial use of a ground water supply at Dinosaur National Monument, under Application No. 29871.

It will be appreciated if you will send to this office twelve copies of the appropriate form for this purpose.

(Sgd) William A. Mott

William A. Mott
Hydraulic Engineer

cc: Superintendent, Dinosaur

WAMott:fh

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON 25, D.C.

IN REPLY REFER TO:
L54-RLW

August 7, 1963

Reg. Director
Admin. Asst.
Asst. to R. D.
Admin.
Cons-Int-Use
Res. Planning
Prog. Coord.
Info. & Publs.
Field Svcs.
Action Taken memo to the Director 8-20-63
File

Memorandum

To: Regional Director, Midwest

From: Chief, Branch of Water Resources

Subject: Water Right Application 29871, Quarry Area, Dinosaur

Enclosed is a "Notice of Lapsing" of water right application 29871 at Dinosaur National Monument. This notice was sent to this Office by the Utah State Engineer.

Our correspondence file indicates that the State Engineer gave notice on July 13, 1961, that proof was due on this application as of June 30, 1962, and on April 26, 1962 sent a second notice. Both notices were forwarded to the Region but apparently no further action has been taken.

Note that the enclosed "Notice of Lapsing" states that a request for reinstatement must be made within 60 days of the date of the notice (July 30, 1963) and that if the application is reinstated its priority will be changed to the date of the request for reinstatement.

A memorandum of August 17, 1961, from Assistant Regional Director Baggley to the Director indicates that the River Well (Application 29871) should be retained for supplemental supply and for irrigation use in the Quarry Area. If this use is still contemplated, reinstatement of the application should be initiated as soon as possible.

Please inform this Office of all future actions in regard to Application 29871. We would also appreciate a memorandum outlining the present status of the Quarry Area water supply.

Edwin W. Reed

Enclosure

cc:
Superintendent, Dinosaur, w/c of enc.

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON 25, D.C.

IN REPLY REFER TO:
L54-RLW

August 7, 1963

Reg. Director
Admin. Asst.
Asst. to R. D.
Admin.
Cons-Int-Use
Res. Planning
Prog. Coord.
Info. & Publ.
Field Servc.
Action Taken memo to the Director 8-20-63
File

Memorandum

To: Regional Director, Midwest

From: Chief, Branch of Water Resources

Subject: Water Right Application 29871, Quarry Area, Dinosaur

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Please inform this Office of all future actions in regard to Application 29871. We would also appreciate a memorandum outlining the present status of the Quarry Area water supply.

Edwin W. Reed

Enclosure

cc:
Superintendent, Dinosaur, w/c of enc.

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
Dinosaur National Monument
91 West Main, Vernal, Utah

IN REPLY REFER TO:
L54

May 15, 1962

Reg. Director
Asst. Reg. Director
Chf. Div. of Admin.
Chf. Div. of Operations
Chf. Div. of Interp.
Chf. Rec. Res. Planning
Chf. Ranger Activities
Field Solicitor
Action Taken Memo to Director 8/20
File Motto

Memorandum

To: Regional Director, Region Two

From: Superintendent, Dinosaur

Subject: Application for Extension of Time, Docket 1, Dinosaur

Please refer to Hydraulic Engineer, Branch of Water Resources, Gordon W. Robertson's memorandum of May 7. att to Motto 6/28/62 memo

Attached is my letter of May 15 to the State Engineer, Utah together with a photo copy of Election to File Water Users Claim form properly notarized, which we are filing proof of subject application and docket.

In view of our action we do not believe that an application for extension of time as requested to Mr. Robertson, is desired.

Earl M. Semingsen
Superintendent

In dupl.
w/attachments

cc: Chief, WODC
w/attachments

C.C MAILED TO WASO
BY Motto DATE 8/20/63

Dinosaur National Monument
91 West Main, Vernal, Utah

May 15, 1962

Wayne D. Criddle
State Engineer
403 State Capitol
Salt Lake City 14, Utah

Dear Sir:

In accordance with your letter of April 26, concerning Application No. 29871 for Dinosaur National Monument, Docket 1, we are attaching Election to File Water Users Claim form executed by the Superintendent, Dinosaur National Monument.

Sincerely,

/s/ Earl M. Semingsen

Earl M. Semingsen
Superintendent

Encl.

cc; Reg.Dir.Reg.Two (2)
Chief, WODC

05-15-1962: attachment for the election to file water users claim

BEFORE THE STATE ENGINEER OF THE STATE OF UTAH

ELECTION TO FILE WATER USERS CLAIM

APPLICATION NO. 29871

STATE OF UTAH)
) ss.
COUNTY OF UINTAH)

Dinosaur National Monument, National Park Service, being first duly sworn, says that he is the owner of the above application; that the development contemplated under this application has been completed and the water placed to beneficial use. In lieu of "Proof of appropriation", the applicant hereby elects to file "A statement of water users claim" or "An amended water users claim" in the pending GENERAL DETERMINATION OF WATER RIGHTS; and that the applicant requests that said statement be prepared by the State Engineer and submitted for execution at an early date.

Earl M Semingsen
Applicant
Earl M. Semingsen, Superintendent

Subscribed and sworn to before me this 15 day of May 1962.

Notary Public
Residing at Vernal, Utah
Commission expires Feb. 3, 1966

04-26-1962: letter to director regarding to appropriate water in utah one must receive approval of an application

RECEIVED
NATIONAL PARK SERVICE
WASHINGTON OFFICE
MAY 1 1 28 PM '62

THE STATE OF UTAH
OFFICE OF STATE ENGINEER
SALT LAKE CITY

April 26, 1962

L 54

WAYNE D. CRIDDLE
STATE ENGINEER

A. B. Ke
5/1/62

Ent

Department of Interior for
Dinosaur National Monument ← Docket 1
c/o Director, National Park Service
Washington 25, D. C.

Gentlemen: RE: APPLICATION NO. 29871

To appropriate water in Utah you must receive approval of an application, complete the intended development work and submit proof that the water has been put to beneficial use. Upon submission of satisfactory proof, a certificate will be issued, which is your evidence of a water right.

Our records indicate that you have not made proof of appropriation or of change on your application. This is due June 30, 1962

Proof must be prepared by a registered engineer or land surveyor and received in this office on or before the above proof due date.

Failure to make proof by the above date shall cause the application to lapse. Blank forms for submitting proof will be sent upon request.

If proof cannot be submitted at this time, an extension of time may be requested by completing the enclosed form and submitting the request, in affidavit form, on or before the proof due date. Submission of a request for an extension of time in no way guarantees that it will be granted. An extension will generally be granted only after an applicant has made a showing of diligence before a meeting with the State Engineer.

Requests should not be made for unreasonable periods of time beyond that needed to complete the appropriation and proof.

Yours truly,
Wayne D. Criddle

Wayne D. Criddle
STATE ENGINEER
403 State Capitol
Salt Lake City 14, Utah

ADDRESS ALL COMMUNICATIONS TO:
ds
Enc: F-22

PROOF DUE

NOV -9 '61

ACTION TAKEN - DATE

November 6, 1961

L54-OBL

Memorandum

To: Regional Director, Region Two

From: Chief, Water Resources Section

Subject: Federal Water Right Related to Storage Reservoir of Glenn L. Murray, Special Use Permittee for SUP 14-10-0232-535, Dinosaur

We have corrected the land description on the front page of the Washington Office copy of the subject permit to agree with the tract sketch attached to it, since it is the N½ of the N.W. quarter of Sec. 36 which is federally owned. The reservoir is shown in the NE¼ NW¼ Sec. 36, T 3 S (not T 36 S), R 25 E, Salt Lake Meridian. We have also substituted Dinosaur National Monument for Rocky Mountain National Park on the attachment (sketch map) and filled in the blanks through and including the county. You may wish to issue a revised permit. Apeco copy attached, as revised.

As indicated in Condition 8 of the permit it is a Park Service function to perfect the rights to at least a part of the water. We also believe that this reservoir site, like the Quarry Headquarters Area, may be in the Uintah Basin Adjudication Area. We do not appear to have been kept fully informed on the various adjudications in Daggett and Uintah Counties in Third and Fourth Judicial Districts, but believe from the order with memorandum of August 17 from Mr. Baggley that a water right filing may be advantageous at the earliest possible date. We shall also appreciate more information on the scope and status of both adjudications.

SIGNED

A. van V. Dunn
Chief, Water Resources Section

Copy to: Superintendent, Dinosaur
Chief, WODC (2)

EXTRA FILE COPY

08-24-1961: memorandum to regional director regarding order of the district court, general determination of water rights within uint

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON 25, D.C.

RECEIVED
REGIONAL TWO OFFICE
1961 AUG 23 AM 8 50
NATIONAL PARK SERVICE
OMAHA, NEBRASKA

IN REPLY REFER TO: L54-OBL

August 24, 1961

Reg. Director
Asst. Reg. Director
Chf. Div. of Admin.
Chf. Div. of Operations
Chf. Div. of Interp.
Chf. Res. Res. Planning
Chf. Resour. Activities
Field Solicitor

Memorandum

To: Regional Director, Region Two

From: Chief, Water Resources Section

Ltr. 9/1/61 to Mr. Donaldson Office of State Engineer Salt Lake City, Utah

Subject: Order of the District Court, General Determination of Water Rights within Uintah Basin, Utah, Dinosaur National Monument

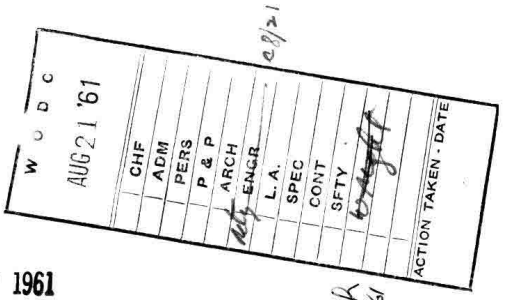
In his memorandum of August 17 Mr. Baggley suggests that the third well in the Spring area at Quarry Headquarters be assigned Number 3, and that the well by the River be designated as "River Well" with no number. The River Well has already been designated as Number 3 in Application 29871 (Docket 2, Part III). It would be better to assign No. 4 to the third well in the Spring area to eliminate confusion in the State Engineer's records unless it is already necessary to correct one of two identities of wells with the same number.

The court order of April 27 seems to provide for filing of water users claim in lieu of proof only if the water user holds an approved application for appropriation or amendment of a right or permit. Reference is also made to the procedure for, or nature of the water users claim. You should obtain a copy of the earlier order, and then comply as far as practical.

You can probably file the necessary claim under application 29871. It would also be possible to file claims under applications 26523 and 26635 for the old wells at Split Mountain, if necessary, but no proof is needed on them. I am not sure whether new applications and claims can be filed if none have already been filed and approved. This leaves me in doubt as to what you can do about the third well in the Spring area and further wells at Split Mountain. You should consult the Field Solicitor and possibly the State Engineer, after you get the copy of the earlier order.

A. van V. Dunn
Chief, Water Resources Section

Copy to: Superintendent, Dinosaur
Chief, WODC (2)



L54

Memorandum

AUG 17 1961

To: The Director
Assistant
From: Regional Director, Region Two

Subject: Opinion of the District Court, General Determination of Water Rights within the Uintah Basin, Utah

As requested in Mr. Dunn's July 20 memorandum, we are attaching a copy of the letter from Mr. Harold D. Donaldson, dated August 8, and a copy of the Order of the District Court, each relating to adjudication in Uintah Basin, Utah.

It seems to us that the submission of the water user's claim simply replaces the proof of appropriation and we still will have to submit an application for a permit to use water prior to the development of a water supply.

For your information and to clarify the identity of the different wells at the Quarry Area in Dinosaur National Monument, the well drilled last fall was designated as Test Well No. 3, Spring Area, as a separate well from the previously identified Well No. 3 near the river bank of the Green River which supplied water for the Headquarters although it was not a potable supply. Well No. 3 in the Spring Area is being developed to supply a potable water for domestic use in the Quarry Area. However, Well No. 3 (river well), we believe, should be retained as a supplemental supply and used for irrigation of residence lawns and as a standby to supply the Quarry water system at such times as Well No. 3 (Spring Area) might be shut down for repairs, etc. To eliminate the confusion in these two wells being identified as Well No. 3 which are in different locations, we suggest we delete the number from the well at the river and identify it as the River Well, Quarry Supply. See attached sketch for relative locations and proposed identifications.

We shall await your comments on the subject Court Order before we proceed with further action on filing a water user's claim with the State of Utah.

(Sgd) George F. Baggley

Assistant Regional Director

Attachments
In duplicate
Copy to: Chief, WODC, w/attachments
Supt., Dinosaur NM, w/attachments

08-08-1961: letter to william a. mott hydraulic engineer regarding adjudication, uintah basin

THE STATE OF UTAH
OFFICE OF STATE ENGINEER
SALT LAKE CITY

August 8, 1961

8/9/61

Reg. Director WAYNE D. CRIDDLE STATE ENGINEER
Asst. Reg. Director
Chf. Div. of Admin.
Chf. Div. of Operations

United States Department of Interior
National Park Service
307 Federal Office Building
106 South 15th Street
Omaha 2, Nebraska

RE: Adjudication, Uintah Basin
Your File: L54

Attention: William A. Mott
Hydraulic Engineer

Dear Sir:

Enclosed find two copies of an Order of the District Court permitting a filing of a Water Users Claim in Lieu of Proof within the Uintah Basin Adjudication area. The filing of this Election permits the Water User to side-step the proof of appropriation in perfecting his water right within the area that is being adjudicated.

In addition, you requested copies of Decrees in Uintah and Daggett Counties, Utah as they affect the water appropriation in Dinosaur National Monument and the Flaming Gorge Recreation Area project. This office is now in the process of completing a Proposed Determination of Water Rights within the Green River Drainage Area in Daggett, Summit and Uintah Counties. This Proposed Determination will determine the water rights on the north slope of the Uintah Mountains that drain into the Green River as far southward as Pot Creek. A copy of this Proposed Determination will be supplied to each Water User in the area after its completion. There is no charge to this Proposed Determination.

If we can be of any further assistance please feel free to let us know.

Yours very truly,

Harold D. Donaldson

Harold D. Donaldson
Adjudication Engineer

HDD:rl

C O P Y

C O P Y

IN THE FOURTH JUDICIAL DISTRICT COURT IN AND FOR DUCHESNE COUNTY

STATE OF UTAH

IN THE MATTER OF THE GENERAL DETERMINATION OF THE RIGHTS TO THE USE OF ALL THE WATER, BOTH SURFACE AND UNDERGROUND, WITHIN THE DRAINAGE AREA OF THE UINTAH BASIN.	)	P E T I T I O N

Comes now Wayne D. Criddle, State Engineer of the State of Utah, and respectfully represents and shows unto this Honorable Court:

1. That your petitioner is the duly appointed, qualified and acting State Engineer of the State of Utah.

2. That the 1959 Legislature of the State of Utah enacted Senate Bill 237 which amended Section 73-3-16, Utah Code Annotated, 1953, by adding thereto a new paragraph which reads as follows:

> In those areas in which general determination proceedings are pending under Chapter 4 of Title 73 of this Code, the state engineer may petition the district court in which said general determination proceeding is pending for permission to waive the requirements of this section and of Section 73-3-17 as to proof of appropriation and proof of change and as to issuance of certificate of appropriation and certificate of change, and to permit each owner of an application to file a verified statement to the effect that he has completed this appropriation or change and elects to file a statement of water users claim in such proposed determination of water rights or any supplement thereto in accordance with and pursuant to Chapter 4 of Title 73, in lieu of proof of appropriation or proof of change.

3. That the above entitled proceeding is a general determination proceeding within the meaning of said statute and pursuant thereto your petitioner requests of this Honorable Court permission to waive the requirements of Sections 73-3-16 and 73-3-17, Utah Code Annotated, 1953, as to proof of appropriation and proof of change for such owners of applications who shall make the election as hereinafter set forth.

4. That your petitioner has surveyed all of the uses of water in the area covered by this general determination proceeding and states to this honorable Court that there is no need to require of the water users a substantial and needless expense in the making of proof of appropriation; and your petitioner alleges that each water user should be permitted by order of this Court

COPY

COPY

to elect whether he will submit proof of appropriation through an engineer of his choice or whether he will file a water users claim in lieu of proof of appropriation in the above entitled general determination proceeding.

WHEREFORE, your petitioner prays that due notice of the filing of this petition be given pursuant to an order of this Court and that the State Engineer be directed to proceed in accord with the statutes as herein set out unless objection thereto is filed on or before the 18th day of March, 1961.

WALTER L. BUDGE
Attorney General

/s/ Dallin W. Jensen
DALLIN W. JENSEN
Assistant Attorney General

Wayne D. Criddle
State Engineer of Utah

IN THE FOURTH JUDICIAL DISTRICT COURT IN AND FOR DUCHESNE COUNTY

STATE OF UTAH

IN THE MATTER OF THE GENERAL DETERMINATION OF THE RIGHTS TO THE USE OF ALL THE WATER, BOTH SURFACE AND UNDERGROUND, WITHIN THE DRAINAGE AREA OF THE UINTAH BASIN.	)	O R D E R

Upon reading and filing the petition of Wayne D. Criddle, State Engineer of the State of Utah, praying for an order of this Court permitting the water users within the area covered by this general determination proceeding to elect to make proof as in the usual manner or to file a water users claim in this proceeding in lieu of proof of appropriation, and good cause appearing therefor, it is

ORDERED that notice of the filing of said petition be given by publication of a copy of this order in the Vernal Express, Vernal, Utah, the Uintah Basin Standard, Roosevelt, Utah, the Sun Advocate, Price, Utah and the Wasatch Wave, Heber, Utah, in the issues of said newspapers published for the weeks commencing February 20, 1961, February 27, 1961, and March 6, 1961, and it is further

ORDERED that any objection to said petition must be filed with said Court and a copy thereof mailed to the office of the Utah Attorney General, State Capitol, Salt Lake City, Utah, on or before March 18, 1961, and it is further

ORDERED that a copy of said petition and of this order be mailed to all attorneys who have entered an appearance in this proceeding.

Dated this 9th day of February, 1961.

/s/ Maurice Harding
DISTRICT JUDGE



July 20, 1961

L54-OBL

Memorandum

To: Regional Director, Region Two

From: Chief, Water Resources Section

Subject: Water Right Application 29871, Well No. 3, Quarry Headquarters, Docket 1, Dinosaur and Adjudication of Water Rights, Uintah County, Utah

In the attached letter of July 13 the Utah State Engineer correctly advises that proof under the subject application is due on June 30, 1962, but that the attached water use claim may be filed in lieu of proof under a court order relating to rights in the Uintah Basin. We believe that the order may have been in connection with the adjudication of rights in Uintah County, to which reference was made in my memorandum of December 18, 1958.

Please supply us with a copy of the Order, and defer any water use claim until we have an opportunity to comment on the order. We should also like to know whether the particular well, which apparently has the same number as well drilled last year, is being used, and whether it will have continued use with the new drilled well also added to the system.

We assume that you will obtain the subject order through the Regional or Field Solicitor. We shall also appreciate reports on, and copies of any decrees in all the adjudications in Daggett and Uintah Counties, Utah and Water Districts 55 and 56, Colorado, to which my memorandum of December 18, 1958, refers.

SIGNED
A. [illegible] Dunn
Chief, Water Resources Section

Attachment

Copy to: Superintendent, Dinosaur, w/c attachment
Chief, WODC (2), w/c attachment

07-13-1961: letter to director regarding proof of appropriation (or change) regarding application no. 29871 is due

THE STATE OF UTAH
OFFICE OF STATE ENGINEER

SALT LAKE CITY
July 13, 1961

WAYNE D. CRIDDLE
STATE ENGINEER

L 54
D. F. Lee
Price

United States of America
Department of Interior for Dinosaur National Monument
c/o Director, National Park Service
Washington 25, D. C.

Gentlemen:

RE: APPLICATION NO. 29871

It is noted that Proof of Appropriation (or Change) regarding your above-numbered application is due to be received in this office on or before June 30, 1962. Your attention is invited to the recent order of the District Court in connection with the adjudication of water rights of the Uintah Basin. This order makes it possible for you to by-pass the proof, which has formerly been required, and to simply file a Water Users Claim in connection with the proposed determination of water rights.

Therefore, if the necessary development work has been completed under your application, all you need do is to complete and return to this office the enclosed form. A Water Users Claim will then be prepared for your consideration and signature and be included in the determination to be submitted to the court.

If your work is not completed, you should, of course, file a request for a further period of time on a form which will be sent to you by this office 60 days prior to the above date. We will be happy to give you any assistance necessary in this matter.

Yours truly,
Wayne D. Criddle
Wayne D. Criddle
STATE ENGINEER

RHH:js
Encl: Election Form A.

DINO

11-08-1960: letter to u.s. dept. of interior regarding application no 13209 request for extension of time

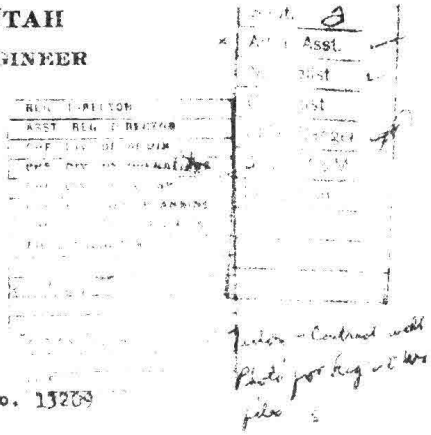
Dkt. 1/ Part II - Well No. 2



THE STATE OF UTAH

OFFICE OF STATE ENGINEER

SALT LAKE CITY
November 8, 196



U. S. Dept. of Interior
National Park Service
Dinosaur National Monument
P. O. Box 621
Vernal, Utah

Gentlemen: RE: APPLICATION No. 13209

Request for Extension of Time in which to submit Proof of Appropriation or Proof of Change contemplated by the above application has been considered and the time for receiving proof is hereby extended from January 1, 1960 to June 30, 1965 inclusive.

Yours truly,

ADDRESS ALL COMMUNICATIONS TO: STATE ENGINEER
403 STATE CAPITOL
SALT LAKE CITY 1
UTAH

WW.

Received w/ 12/7/60 Reg. memo to Director

EXTENSION GRANTED

P. S. Although this extension is granted in accordance with the provisions of the law, I earnestly recommend that you proceed to prepare and submit proof at the earliest possible date. One cannot foresee what contingencies might arise in the future; the present possession of your certificate might stand you in good stead.

08-01-1960: memorandum to regional director regarding approved application no. 29871, well no. 3

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON 25, D. C.

IN REPLY REFER TO:
L54-OBL

REG. DIRECTOR
ASST. REG. DIRECTOR
CHF. DIV. OF ADMIN.
CHF. DIV. OF OPERATIONS
CHF. DIV. OF INTERP.
CHF. REG. RES. PLANNING
CHF. RANGER ACTIVITIES
FIELD SOLICITOR
ACTION TAKEN
FILE

August 1, 1960

Memorandum

To: Regional Director, Region Two

From: Chief, Water Resources Section

Subject: Approved Application No. 29871, Well No. 3, Docket 1, Part III, Dinosaur

Attached are the following:

1. Apeco copy of photostat copy of the subject approved application which has been received from the State Engineer.

2. Form letter of transmittal of July 11, 1960, from the State Engineer.

3. Copy of the application as sent to the State Engineer with letter of July 9, 1957, from Mr. Lee, with part of the changes in red as prescribed when made by the applicant at the direction of the State Engineer. The changes in red were made when the application was signed and resubmitted with my letter of April 21, 1958, following its return with letter of April 10, 1958, from Mr. Gardner, of which all offices received copies. We have completed the application in accordance with photostat returned from State Engineer.

I assume that the State Engineer sent a completely executed copy, or the original, of item 3 to the Superintendent. Accordingly, I am only sending items 1 and 2 to him with a copy of this memorandum. Copies of all three items are being sent to WODC.

We shall appreciate the Superintendent's confirmation that he did receive the so-called original signed copy of the approved application.

There were two runs to prepare the five copies of item 3, and I note in answer to question 17 that the word "inches" follows "8" on the three copies which I retained, but appears to have been omitted on the two copies sent to the State Engineer. The other uncertain possibility is that Mr. Gardner rewrote the copy which he returned on April 10, 1958.

We note that the second line in red, in answer to question 8 refers to 8 ft. and 6" pipe, and the 8 ft. was not caught by this office or the State Engineer.

It is also noted on page 3 of the apeco copy that the first line shows the application to have been received at 10 AM, April 25, 1958. The aforementioned letter of April 10 from the State Engineer indicates that the application had not been signed when first submitted with the letter of July 9, 1957. Thus, nearly a year's priority appears to have been lost because the State Engineer did not accept receipt until it arrived with the signature. Mr. Gardner's letter of April 10, 1958, indicates, however, that a much earlier priority could have been obtained if he had at least scanned and returned the application within a more reasonable time after first receipt. I admit that it was my error that it was not signed in 1957 because I confused the timing of the respective times for signing applications and proofs.

I do not think the lost priority is significant, but you might obtain the Field Solicitor's opinion as to whether we should make an issue of the point.

It seems to me that the apeco copy, item 1, might be discarded after each office compares it with the typed copy, item 3, and only the latter should be filed with item 2, in the docket. Any office should report any other variations between the two copies which it finds I may have overlooked. I am also transferring my copy of Mr. Gardner's letter of April 10, 1958, and my memorandum of April 21, 1958, from our letter file to the docket. Cannot locate 8/3/60 Transferred to Docket #1 8/3/60

We are also filing a print of incomplete Drawing 6972 beneath the approved application, and are forwarding the tracing, with the pencil notations to you separately. Filed 8/3/60 All offices may wish interim prints if they do not now have them. The tracing may also be completed, if proper, or used as the base, for the proof when you can provide measured proof of the full beneficial use. I assume, however, that you may have to obtain an extension of time by next year because 0.111 sec.ft. of water are not fully used, and the drawing may not represent the system when proof is made.

A. van V. Dunn
Chief, Water Resources Section

Attachments 3

Copy to: Superintendent, Dinosaur, w/c 2 attachments
Chief, WODC, w/c 3 attachments

07-11-1960: letter to director regarding approval of application no. 29871

FORM 33 2M 5-57

RECEIVED
JUL 25 11 42 AM '60

THE STATE OF UTAH
OFFICE OF THE STATE ENGINEER
SALT LAKE CITY
July 11, 1960

L54
S. E. Lee
Price
per memo 8/1/60

U. S. of America
Department of Interior for Dinosaur National Monument
C/O Director, National Park Service
Washington 25, D. C.

Gentlemen:

RE: APPROVED APPLICATION NO. 29871

Enclosed find Application No. 29871 which has been approved by me. The approved Application is your authority to proceed with actual construction work which, under Sections 73-3-10 and 73-3-12, Utah Code Annotated, 1953, as amended, must be diligently prosecuted to completion. The water shall be put to beneficial use and proof of appropriation made to the State Engineer on or before ---------June 30, 1962---------- otherwise the application will lapse.

Failure on your part to comply with the requirements of the statutes may result in forefeiture of this Application.

Yours truly,

Wayne D. Criddle

Wayne D. Criddle
STATE ENGINEER
403 STATE CAPITOL
SALT LAKE CITY, UTAH

ADDRESS ALL COMMUNICATIONS TO:

pmm
Enclosure

WASD

APPLICATION APPROVED
SURFACE

00-00-0000: application to appropriate water for miscellaneous purposes

Form 15 9-53 2000

Application No. 27771

RECEIVED
APR 25 1958
OFFICE

Application to Appropriate Water for Miscellaneous Purposes
STATE OF UTAH

Do not fill out this blank until you have read carefully and thoroughly understand the Rules and Regulations on the back hereof and all notes in the body of it, as well as the rules and regulations in pamphlet form promulgated by the State Engineer.

This blank must not be used if the main purpose is for Irrigation, Power, Mining, Stock-Watering or Domestic Purposes.

For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, for Miscellaneous *purposes, application is hereby made to the state engineer, based upon the following showing of facts, submitted in accordance with the requirements of the Laws of Utah.*

Note.—The information given in the following blanks should be free from explanatory matter, but when necessary a complete supplementary statement should be made on the following page under the heading "Explanatory."

1. *The name of the applicant is* The United States of America, Dept. of the Interior for Dinosaur National Monument
2. *The post office address of the applicant is* % Manager, National Park Service, Washington D. C.
3. *The quantity of water to be appropriated is* 0.111 *second-feet or* -- *acre-feet* (See note on page 4)
4. *The water is to be used each year from* January 1 (Month) (Day) *to* December 31 (Month) (Day) *incl.,*
   and stored each year (if stored) from -- (Month) (Day) *to* -- (Month) (Day) *incl.,*
5. *The drainage area to which the direct source of suppy belongs is* Green River (Leave blank)
6. *The direct source of supply is*† Underground flow of Green River (Name of stream or other source)
   which is tributary to Colorado River, *tributary to*

†Note.—Where water is to be diverted from a well, a tunnel, or drain, the source should be designated as "Underground Water" in the first space and the remaining spaces should be left blank. If the source is a stream, a spring, a spring area, or a drain, so indicate in the first space, giving its name, if named, and in the remaining spaces, designate the stream channels to which it is tributary, even though the water may sink, evaporate, or be diverted before reaching said channels. If water from a spring flows in a natural surface channel before being diverted, the direct source should be designated as a stream and not a spring. (See note on page 4.)

7. *The point of diversion from ~~stream, spring, spring area, drain~~, well (flowing or pump), ~~tunnel~~,* (Strike words not needed)
   or is in Uintah *county, situated at a point**
   S 37° 32' 40" E, 4038.93 feet from the N.W. Corner of Section 35, T 5 S, R 23 E, Salt Lake Meridian

*Note.—The point of diversion must be located definitely by course and distance or by giving the distances north, south, and east or west with reference to a United States land survey corner or United States mineral monument within a distance of six miles of either, or if at a greater distance, to some prominent and permanent natural object. (Also see note on page 4.)

No Application will be received in which the point of diversion is not described definitely. Any change made in description after Application is received and before approved will bring down the priority of Application to the date the amendment is made of record in the state engineer's office.

8. *The diverting and carrying works will consist of* (Dug) Well No. 3 and pumping [illegible] 20 gal./min. cast iron pipe to distribution reservoir the well [illegible] and 20 ft. [illegible] a pump with [illegible] transfer pipe and conveyed through [illegible] for the [illegible]
9. *The character of the diverting channel will be* ~~earth, lined, flumed, or piped~~ (Strike ones not needed)
10. *The diverting works and diverting channel will be constructed of* ~~earth, wood, iron, etc.~~ (Strike words not needed)
11. *The length of the diverting channel, exclusive of laterals, will be* 2690 [illegible] ft.
12. *The top width of the diverting channel will be (if a ditch)* --
13. *The bottom width of the diverting channel will be (if a ditch)* --
14. *The depth of water in the diverting channel will be (if a ditch)* -- feet
15. *The width of the diverting channel will be (if a flume)* -- feet
16. *The depth of water in the diverting channel will be (if a flume)* 20 ft. 24 inch feet
17. *The diameter of the diverting channel will be (if a pipe)* 1150 ft. of [illegible] PT90 ft. of [illegible] inches
18. *The grade of the diverting channel will be* 408 vertical and horizontal [illegible] feet per thousand
19. *The purposes for which the water is to be used are* Domestic, public consumption and sanitation, irrigation and utility needs of Quarry Area of Monument

This will consume 0.111 ~~0.10 f~~ *second-feet of the water and* [illegible] *acre-feet will be returned to the natural stream or source at a point described as follows: (See note under No. 7)* S 45° 30' E 1850 ft. [illegible]

(See Explanatory)

EXPLANATORY

The following additional facts are set forth in order to define more clearly the full purpose of the proposed appropriation. (If additional space is required under this paragraph, sheets cut to same size as this form folded should be added, identified as "Explanatory Continued")

Well No. 3 is an alternative to Wells 1 and 2 in spring area described in Application 13209, because 1956 pump tests proved Wells 1 and 2 inadequate. Claims under Application 13209 will hereafter probably be limited to water of natural spring in designated spring area. Well No. 3 is 55 feet from north bank of Green River, 850 feet upstream from drainage from said spring area. Well No. 3 is at ground elevation 4940, depth 30 feet, casing diameter 2 feet. Water at approximate depth of 16 feet is same as adjacent river and enters from river side of casing. Electric driven 50 gpm pump to deliver water to one or more 50,000 gallon distribution reservoirs above said spring area, whence [illegible] by gravity to Quarry Area of [illegible] SW¼ Sec. 26, and NW¼ Sec. 35 north of Green River in T 4 S, R 23 E, SLM. Water system, under $65,543 contract, is designed for estimated 19[illegible] water and sanitary needs, in tourist season, of 90,000 day visitors per month, residences of 4 permanent and 4 temporary employees and their families, irrigation of 2 acres, and miscellaneous purposes at Quarry utility area. This development is part of 10 year project, designated as MISSION 66, to provide facilities for anticipated public use of 1966, for which Wells 1 and 2 would be inadequate. The number of annual visitors has increased as follows: 1941 - 8,706; 1950 - 12,911; 1953 - 22,334; 1955 - 68,735; and 1956 - 73,058. Approximately 60% of public use is in July and August and 2.5% is now divided over months of October through March, but seasonal variations are subject to some change. ~~Designated points of return flow are mouths of normally dry draws in which irrigation and sewage disposal is from 0.25 to 0.60 mile from Green River and return flow will be largely consumed by evaporation and native vegetation.~~

Peak day use estimates: 24 employees at 60 gpc - 1440 gallons; 1[illegible],00 visitors at 5 gpc - 50,000; 2 acres (87,120 sq.ft.) irrigated at 18.5 gallons per 100 sq. ft. - 16,717 gallons; ~~car and other equipment washing and dust laying at utility area - 3,500 gallons;~~ total 71,657 gal. per day, or average of 0.111 cu.ft. per sec. 50,000 gal. Storage is for reconciliation of hourly variations in rates of diversion and use, and for fire protection. The quantity of water sought to be appropriated is limited to that amount which can be beneficially used for the purposes herein described.

Nothing in this application shall constitute a waiver [illegible] any [illegible] rights which the United States may have to the same water.

The United States of America
By: Jackson E. Price
Jackson E. Price
Assistant Director
National Park Service
Department of the Interior
*Signature of Applicant**

*If applicant is a corporation or other organization, signature must be in the name of such corporation or organization by its proper officer. If a corporation, the affidavit below need not be filled in. If there are more than one applicant, a power of attorney, authorizing one to act for all should accompany the Application.

STATE of UTAH,)
) ss.
County of .....)

On the ..... day of ..... , 19 , personally appeared before me, a notary public for the State of Utah, the above applicant who, on oath, declared that he is a citizen of the United States.

My Commission expires .....
(SEAL)
Notary Public.

00-00-0000: application to appropriate water for miscellaneous purposes state engineers endorsement

(This page is not to be filled in by applicant)

10:00 A.M.

State Engineer's Endorsements

1. Apr. 25, 1958 Application received ~~over the counter~~ by mail in state engineer's office by Lea AB
2. Priority of Application brought down to, account of
3. No fee req Fee for filing Application, $, received by Rec. No.
4. May 19 1958 Application ~~PROTESTED~~ in book No 14 page 382 , and indexed by W.C.R.
5. April 29 1958 Application platted by
6. Apr 1, 1958 Application examined by
7. Application returned, with letter, to for correction
8. Corrected Application submitted by mail to state engineer's office
9. Fee for publishing notice requested.
10. June 6, 1960 Fee for publishing notice, $ 15.00, received by Rec. No. 00771
11. April 19, 1960 Application approved for advertisement by R.R.H
12. Apr. 19, 1960 Notice to water users prepared by R.R.H
13. Apr. 28, 1960 Publication began; was completed May 12, 1960
    Notice published in Vernal Express, Vernal, Utah
14. May 2, 1960 Proof slips checked by C.B. & D.G.
15. Application protested by

    May 23, 1960 Protest paid Rec. 2nd 2 - 1077 - Rec

16. JUN 28 1960 Application designated for ~~location~~ approval by STAFF WDC
17. Recording Application required
18. No fee req Fee for approving Application $2.50 received by Rec. No.
19. July 18, 1960 Application proofread by DS
20. July 18, 1960 Application ~~rejected~~ approved and returned to applicant

This application is approved, subject to prior rights, if any, on the following conditions:

1. That actual construction work shall be diligently prosecuted to completion.
2. That Proof of Appropriation shall be submitted to the state engineer's office by June 30, 19[illegible]

Wayne D. Criddle
Wayne D. Criddle, State Engineer.

21. Time for making Proof of Appropriation extended to
22. Proof of Appropriation submitted.
23. Fee for filing Proof of Appropriation, $1, rec. by Rec. No.
24. Fee for exam. maps, profiles and drawings, $5, rec. by Rec. No.
25. Fee for issuing Cert. of Appropriation, $1, rec. by Rec. No.
26. Certificate of Appropriation, No. , issued.

I Hereby Certify that the foregoing is a true copy of the Application by to appropriate water and of the endorsements therein as shown by the records of my office on the date given below.

Salt Lake City, Utah, ,19

State Engineer

Application No. 29871

Form 115 9-52 1500

Application No. 29871

Application to Appropriate Water for Miscellaneous Purposes
STATE OF UTAH

Do not fill out this blank until you have read carefully and thoroughly understand the Rules and Regulations on the back hereof and all notes in the body of it, as well as the rules and regulations in pamphlet form promulgated by the State Engineer.

This blank not to be used if the main purpose is for Irrigation, Power, Mining, Stock-Watering or Domestic Purposes.

For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, for Miscellaneous *purposes, application is hereby made to the state engineer, based upon the following showing of facts, submitted in accordance with the requirements of the Laws of Utah.*

Note.—The information given in the following blanks should be free from explanatory matter, but when necessary a complete supplementary statement should be made on the following page under the heading "Explanatory."

1. *The name of the applicant is* The United States of America, Dept. of the Interior for Dinosaur National Monument
2. *The post office address of the applicant is* % Director, National Park Service, Washington 25, D.C.
3. *The quantity of water to be appropriated is* 0.111 *second-feet or* -- *acre-feet* (See note on page 4)
4. *The water is to be used each year from* January 1 (Month) (Day) *to* December 31 (Month) (Day) *incl.,*
   and stored each year (if stored) from -- (Month) (Day) *to* -- (Month) (Day) *incl.,*
5. *The drainage area to which the direct source of suppy belongs is* Green River (Leave blank)
6. *The direct source of supply is*† ~~Unknown~~ Subsurface Underground flow of Green River (Name of stream or other source)
   which is tributary to Colorado River, *tributary to* --

†Note.—Where water is to be diverted from a well, a tunnel, or drain, the source should be designated as "Underground Water" in the first space and the remaining spaces should be left blank. If the source is a stream, a spring, a spring area, or a drain, so indicate in the first space, giving its name, if named, and in the remaining spaces, designate the stream channels to which it is tributary, **even though the water may sink, evaporate, or be diverted before reaching said channels.** If water from a spring flows in a natural surface channel before being diverted, the direct source should be designated as a stream and not a spring. (See note on page 4.)

7. *The point of diversion from* ~~*stream, spring, spring area, drain,*~~ *well (*~~*flowing*~~ *or pump),* ~~*tunnel,*~~ (Strike words not needed)
   or ..... *is in* Uintah *county, situated at a point**
   S 37° 52' 40" E, 1038.93 feet from the N.W. Corner of Section 35, T 4 S, R 23 E, Salt Lake Meridian

*Note.—The point of diversion must be located definitely by course and distance or by giving the distances north or south, and east or west with reference to a United States land survey corner or United States mineral monument, if within a distance of six miles of either, or if at a greater distance, to some prominent and permanent natural object. (Also see note on page 4.)

No Application will be received in which the point of diversion is not described definitely. Any change made in this description after Application is received and before approved will bring down the priority of Application to the date when the amendment is made of record in the state engineer's office.

8. *The diverting and carrying works will consist of* (Dug) Well No. 3 and electric driven 50 gpm pump, cast iron pipe to distribution reservoir. The well is to be dug between 0 and 30 ft. & cased with 24-inch diameter pipe and conveyed through 3940 ft. of 8 ft. and 6" diameter pipe. *The cross section of the diverting channel will be* ~~-+-~~ (Strike ones not needed)
9. *The diverting works and diverting channel will be constructed of* ~~*earth, wood,*~~ *iron,* ~~*concrete.*~~ (Strike words not needed)
10. *The length of the diverting channel, exclusive of laterals, will be* ~~3,940~~ 3970 ft. *feet*
11. *The top width of the diverting channel will be (if a ditch)* -- *feet*
12. *The bottom width of the diverting channel will be (if a ditch)* -- *feet*
13. *The depth of water in the diverting channel will be (if a ditch)* -- *feet*
14. *The width of the diverting channel will be (if a flume)* -- *feet*
15. *The depth of water in the diverting channel will be (if a flume)* -- *feet*
16. *The diameter of the diverting channel will be (if a pipe)* ~~1750 ft. of 24 inch~~ 2790 ft. of 8 inches 6 *inches*
17. Pump lift--
18. *The grade of the diverting channel will be* ~~*The grade of the diverting channel will be*~~ 408 vertical and horizontal ~~*per thousand*~~
19. *The purposes for which the water is to be used are* Domestic, public consumption and sanitation, irrigation and utility needs of Quarry Area of Monument

This will consume 0.111 / or - *second-feet of the water and* 0.011 / or - *second-feet will be returned to the natural stream or source at a point described as follows: (See note under No. 7)* ~~S 45° 30' E 1850 ft. & S 15° 30' W 500 ft. from said N.W. Corner Sec. 35~~ (See Explanatory)

EXPLANATORY

The following additional facts are set forth in order to define more clearly the full purpose of the proposed appropriation. (If additional space is required under this paragraph, sheets cut to same size as this form folded should be added, identified as "Explanatory Continued")

Well No. 3 is an alternative to Wells 1 and 2 in spring area described in Application 13209, because 1956 pump tests proved Wells 1 and 2 inadequate. Claims under Application 13209 will hereafter probably be limited to water of natural spring in designated spring area. Well No. 3 is 55 feet from north bank of Green River, 850 feet upstream from drainage from said spring area. Well No. 3 is at ground elevation 4940, depth 30 feet, casing diameter 2 feet. Water at approximate depth of 16 feet is same as adjacent river and enters from river side of casing. Electric driven 50 gpm pump to deliver water to one or more 50,000 gallon distribution reservoirs above said spring area, whence distribution by gravity to Quarry Area of Dinosaur National Monument in SW¼ Sec. 26, and NW¼ Sec. 35 north of Green River in T 4 S, R 23 E, SLM. Water system, under $65,543 contract, is designed for estimated 1966 water and sanitary needs, in tourist season, of 90,000 day visitors per month, residences of 4 permanent and 4 temporary employees and their families, irrigation of 2 acres, and miscellaneous purposes at Quarry utility area. This development is part of 10 year project, designated as MISSION 66, to provide facilities for anticipated public use of 1966, for which Wells 1 and 2 would be inadequate. The number of annual visitors has increased as follows: 1941 - 8,706; 1950 - 12,911; 1953 - 22,334; 1955 - 68,735; and 1956 - 73,058. Approximately 60% of public use is in July and August and 2.5% is now divided over months of October through March, but seasonal variations are subject to some change. Designated points of return flow are mouths of normally dry draws in which irrigation and sewage disposal is from 0.25 to 0.60 mile from Green River and return flow will be largely consumed by evaporation and native vegetation.

Peak day use estimates: 24 employees at 60 gpc - 1440 gallons; 10,000 visitors at 5 gpc - 50,000; 2 acres (87,120 sq.ft.) irrigated at 18.5 gallons per 100 sq. ft. - 16,717 gallons; car and other equipment washing and dust laying at utility area - 3,500 gallons; total 71,657 gal. per day, or average of 0.111 cu.ft. per sec. 50,000 gal. Storage is for reconciliation of hourly variations in rates of diversion and use, and for fire protection.

The quantity of water sought to be appropriated is limited to that amount which can be beneficially used for the purposes herein described.

Nothing in this application shall constitute a waiver of any other rights which the United States may have to the same water.

The United States of America

By:

Jackson E. Price

Assistant Director

National Park Service

Department of the Interior

*Signature of Applicant**

*If applicant is a corporation or other organization, signature must be in the name of such corporation or organization by its proper officer. If a corporation, the affidavit below need not be filled in. If there are more than one applicant, a power of attorney, authorizing one to act for all should accompany the Application.

STATE of UTAH,)
) ss.
County of)

On the ..... day of ....., 19..., personally appeared before me, a notary public for the State of Utah, the above applicant who, on oath, declared that he is a citizen of the United States.

My Commission expires .....

(SEAL)

Notary Public.

00-00-0000: application to appropriate water for miscellaneous purposes state engineers endorsement

(This page is not to be filled in by applicant)

State Engineer's Endorsements

10:00 A.M.

1. April 25, 1958 *Application received* ~~xxxx~~ *by mail in state engineer's office by* EAB
2. *Priority of Application brought down to, account of*
3. No fees req. *Fee for filing Application, $*____, *received by* ____ *Rec. No.*____
4. May 19, 1958 *Application* photostated *in book* No. 14, *page* 382, *and indexed by* GER
5. April 29, 1958 *Application platted by* EET
6. April 14, 1960 *Application examined by* RFC
7. *Application returned, with letter, to* ____ *for correction*
8. *Corrected Application resubmitted* ~~xxxx~~ *by mail to state engineer's office.*
9. *Fee for publishing notice requested.*
10. June 6, 1960 *Fee for publishing notice,* $ 15.00, *received by* NON *Rec. No.* 00771
11. April 14, 1960 *Application approved for advertisement by* RKH
12. April 19, 1960 *Notice to water users prepared by* RKH
13. April 28, 1960 *Publication began; was completed* May 12, 1960
    Notice published in Vernal Express, Vernal, Utah
14. May 2, 1960 *Proof slips checked by* CB & JG
15. *Application protested by* ____

    May 23, 1960 - Publisher paid MEB. No. 2 1097 NON
16. June 28, 1960 *Application designated for* ~~xxxx~~ *by* STAFF WDC
17. *Fee for approving Application requested*
18. No fees req. *Fee for approving Application,* $2.50 *received by* ____ *Rec. No.*____
19. July 18, 1960 *Application proofread by* IP
20. July 18, 1960 *Application* ~~xxxxxx~~ *and returned to applicant*

This application is approved, subject to prior rights, if any, on the following conditions:

1. *That actual construction work shall be diligently prosecuted to completion.*
2. *That Proof of Appropriation shall be submitted to the state engineer's office by* June 30, 1962
3. ____

/s/ Wayne D. Criddle

Wayne D. Criddle *State Engineer.*

21. *Time for making Proof of Appropriation extended to*
22. *Proof of Appropriation submitted.*
23. *Fee for filing Proof of Appropriation,* $1, *rec. by* ____ *Rec. No.*____
24. *Fee for exam. maps, profiles and drawings,* $5, *rec. by* ____ *Rec. No.*____
25. *Fee for issuing Cert. of Appropriation,* $1, *rec. by* ____ *Rec. No.*____
26. *Certificate of Appropriation, No.*____, *issued.*

I Hereby Certify that the foregoing is a true copy of the Application by ____ to appropriate water and of the endorsements therein as shown by the records of my office on the date given below.

Salt Lake City, Utah, ____, 19____

State Engineer

Application No. 29871

NOTICE TO APPLICANT

The approval of this Application is not a Certificate of Appropriation. It is merely your authority to begin construction work, which must be prosecuted diligently to completion. To secure a Certificate of Appropriation under this Application, Proof of Appropriation must be submitted within the time limit allowed by the state engineer. The amount of water for which Certificate will be issued will depend upon the amount of water actually put to a beneficial use, not to exceed, however, the amount of water specified in this Application. Proof of Appropriation must be made in accordance with the requirements of the law. For further information write the state engineer.

Note.—The second space provided in Paragraph 3 on page 1 must not be used except in cases in which storage is contemplated; in such case Paragraph 4 (first line) should indicate the time in each year during which the water will be released and used. The lands to be inundated by the reservoir shall be described under "explanatory" as nearly as may be and by government subdivisions if upon surveyed lands, and the area of the reservoir when at full stage shall be given in acres.

If the Reservoir is Located on the Channel of the Source from which the water is to be appropriated, it shall be so stated under "explanatory," and—

1. The intersection of center line of stream bed and longitudinal axis of impounding dam shall be described in Paragraph 7.
2. The point where the released storage will be rediverted from the natural stream shall be described under "explanatory" in accordance with the note under Paragraph 7. If a diversion dam is involved, the point of rediversion is intersection of center line of stream bed and longitudinal axis of dam.

When Water is not Stored in the Natural Channel of the Source from which it is to be appropriated, it shall be so stated under "explanatory," and—

1. The point of diversion from the supplying source shall be described in Paragraph 7.
2. The intersection of center line of stream bed and longitudinal axis of impounding dam and the point where the released storage will be rediverted from a natural channel shall be described under "explanatory" in accordance with the note under Paragraph 7. If a diversion dam is involved the point of rediversion is intersection center line of stream bed and longitudinal axis of dam.

In all cases Paragraphs 8 to 18, inclusive, shall describe the entire diverting works, exclusive of natural channels and laterals, even if already constructed in whole or in part.

If Application is Made for the Water of a Number of Springs, or other sources collected at a common point, said point shall be described as the point of diversion in Paragraph 7 and the point of diversion from each source shall also be described under "explanatory," in accordance with the note under Paragraph 7. The quantity of water sought from each source shall be indicated under "explanatory," the total equaling the quantity specified in Paragraph 3. Where the source of supply is in reality a spring area, the point of diversion is the point where the water is collected within the area, the point of collection being described in Paragraph 7; in such case the exterior boundary of the spring area shall be described under "explanatory" by metes and bounds and located as outlined by the note under Paragraph 7.

Rules and Regulations

If a dam is not required across the natural channel of the stream or outlet of the lake comprising the supplying source to divert water into the diverting channel, the point of diversion or rediversion shall be the intersection of the axis of the first tangent in the diverting channel and the high water line on the adjacent side of the natural channel or body of water of the supplying source.

All waters in this state, whether above or under the ground, are the property of the public, subject to all existing rights to the use thereof. No appropriation of the unappropriated public water may be made and no rights to the use thereof shall be recognized except Application for such appropriation first be made to the state engineer.

The Application must be signed by the applicant at the bottom of page 2 and the affidavit relating to citizenship acknowledged before a notary public before the Application be received by the state engineer.

An application shall not be made for more than one purpose, except where the secondary purpose is a necessary incident to the primary one; as for instance, an Application for irrigation purposes may specify domestic purposes as a necessary incident.

An Application made to appropriate water for use in a single system with one or more points of diversion or sources of supply, or both, if the water is commingled, may be accepted if made by one person or by a corporation, if and when the points of diversion be in close proximity or located in contiguous sections by government survey; provided, however, that the quantity of water sought, also tie to a U. S. land survey corner, be given for each point of diversion, and the point of commingling given by tie to a U. S. land survey corner.

In case a material error is made in the description of the point of diversion, or in case any error is made the correction of which would enlarge the rights sought in an Application after its receipt in the state engineer's office, then such error may be corrected before advertising, but the priority date of the Application will be changed to the time when the corrected Application is resubmitted (received) in the state engineer's office; and, if the notice to water users has been published, the state engineer may in his discretion, before approval, cause a revised notice to be published at the expense of the applicant.

When there are two or more coapplicants the Application must be accompanied by a power of attorney authorizing one to act for all.

The applicant's permanent address should be given in Paragraph 2, and the state engineer notified promptly of any change in address; otherwise applicant may lose rights initiated by Application by failing to receive notices sent from the state engineer's office.

No Application or other paper (requiring a fee) pertaining to an Application will be marked received unless accompanied by the required filing fee.

Applications accepted and numbered by the state engineer, when returned to applicant for correction or additions, must be amended with red ink. Erasures must not be made, but any matter may be eliminated by running a red line through it in such a manner that the stricken matter may still be read. Corrected Applications must be resubmitted to the state engineer's office, within sixty days from the date of state engineer's letter returning Application for correction; otherwise the Application will lapse.

Applicants will be informed by the State engineer's office when cost of publishing notice of Application is due, and must advance cost within sixty days after date of notice, otherwise Application will lapse.

Fees Required by Law Payable to State Engineer

For filing Application to appropriate 10 second-feet of water or less and additionally, $1.00 for each second-foot above 10.	$2.50
For filing Application to appropriate 500 acre-feet of water or less and additionally, 2 cents for each acre-foot above 500.	2.50
When the filing fee on any Application to appropriate water shall exceed $1,000.00, the balance of the fee in excess of $1,000.00 may, at the option of the applicant, be paid at time the Proof of Appropriation is submitted.	
For approving and recording completed Application	2.50
For filing written Proof of Appropriation	1.00
For examining maps, profiles and drawings that are part of the Proof of Appropriation	5.00
For issuing Certificate of Appropriation	1.00

NOTE.—Applicants will save time and expense by familiarizing themselves with the law before making Application.

IN REPLY REFER TO:
L54-OBL

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON 25, D. C.

RECEIVED
REGIONAL OFFICE
1960 MAY 31 AM 10 54
NATIONAL PARK SERVICE
OMAHA, NEBRASKA

May 27, 1960

REG. DIRECTOR
ASST. REG. DIRECTOR
CHF. DIV. OF ADMIN.
CHF. DIV. OF OPERATIONS
CHF. DIV. OF INTERP.
CHF. REC. RES. PLANNING
CHF. RANGER ACTIVITIES
FIELD SOLICITOR
ACTION TAKEN Filed
FILE

Memorandum

To: Regional Director, Region Two

From: Chief, Water Resources Section

Subject: Water Right Application 29871, Well No. 3, Part III, Docket 1, Dinosaur

Attached are copy of letter of May 23 from the Casher, State Engineer's Office, and copy of the published notice of the subject application which we prepared and filed with the State Engineer with letter of July 9, 1957, from the Acting Associate Director.

We are paying the $15.00 for publication under your Work Order 3-WR-60, General Ledger Account 102.4, Dinosaur. If the $4,150 which you show under that account does not include enough for this payment, the work order should be revised toward the end of June. Both the application and obligation would have been handled by your office if the filing had been made later.

The published notice should be filed in Part III of the docket. We should receive the approved application very soon after payment, after which we will distribute the copies for the docket.

A. van V. Dunn
Chief, Water Resources Section

Attachment filed in Docket #1

Copy to: Superintendent, Dinosaur. With copy of attachment.
Chief, WODC 2. With copy of attachment

05-23-1960: letter to director from state of utah regarding reference made to notice to water users

WR Copy

RECEIVED
NATIONAL PARK SERVICE
WASHINGTON OFFICE
MAY 26 9 08 AM '60

THE STATE OF UTAH
OFFICE OF STATE ENGINEER
SALT LAKE CITY

WAYNE D. CRIDDLE
STATE ENGINEER

May 23, 1960

U. S. Dept. of the Interior for
Dinosaur National Monument
c/o Director, National Park Service
Washington 25, D. C.

Gentlemen: RE: APPLICATION NO. 29871

Reference is made to Notice to Water Users, which was published in the Vernal Express, Vernal, Utah from April 28, to May 12, 1960.

The cost of advertising Application No. 29871 was $15.00.

Enclosed are triplicate copies of certified invoice covering the above amount.

Yours truly,

Norma Nelson
Cashier

Enc: Proof
Invoice

Pt 1 III - Docket 1
Dinosaur

NOTICE TO WATER USERS

The following applications have been filed with the State Engineer to change or appropriate water in Uintah County, State of Utah, throughout the entire year unless otherwise designated. All locations are in SLB&M, unless otherwise designated.

To Change:

a-3690—San Francisco Chemical Co., Drawer F. Montpelier. Ida. proposes to change the point of diversion of 13 sec.-ft. of water initiated by Application No. 23384. The water was to have been diverted from a well at a point N. 55 degrees 12' E. 1007 ft. from S¼ Cor. Sec. 29, T2S, R22E, and used for domestic purposes, processing phosphatic minerals, and irrigation of 113.7 acres, all uses in Lot 2, Sec. 5, Secs. 31, 32, T2S, R22E.

Hereafter, 13 sec.-ft. will be diverted from five wells at the following points: (1) 12 and 16-in. well, 630 ft. deep—N. 55 degrees 12' E. 1007 ft. from S¼ Cor. Sec. 29; (2) 24-in. bet. 1500 and 2500 ft. deep—N. 05 degrees 00' E. 3460 ft. from SW Cor. Sec. 32, both in T2S, R22E; (3) 24-in. bet. 1500 and 2500 ft. deep—N. 4435 ft. from SE Cor. Sec. 36, T2S, R21E; (4) 24-in. bet. 1500 and 2500 ft. deep—N. 960 ft. and E. 750 ft. from SW Cor. Sec. 32; (5) 24-in. bet. 1500 and 2500 ft. deep—N. 3700 ft. and E. 2480 ft. from SW Cor. Sec. 31, both in T2S, R22E. The water will be conveyed from the wells to a 6,000,000 gal. equalizing reservoir and used for the domestic requirements of 100 families, 500 employees, and processing phosphatic minerals, and from Apr. 1 to Nov. 1 to irrigate 113.7 acres in Lot 2, Sec. 5, T3S, R22E, Secs. 31, 32, T2S, R22E.

Cor. Sec. 20, T4S, R21E. The water is to be used for the domestic requirements of one family, for the watering of 10 cows, 10 sheep and 2 horses, and from Apr. 1 to Oct. 31 to irrigate 1.33 acres, all uses in SE¼SE¼NE¼, NE¼NE¼-SE¼ said Sec. 20.

31415— Ethel M. Palmer, RFD No. 1, Vernal, Ut. 1 sec.-ft. from a 6-in. well, bet. 20 and 50 ft. deep at a point N. 460 ft. and E. 41 ft. from W¼ Cor. Sec. 16, T4S, R21E. The water is to be used for the domestic requirements of two families, for the watering of 30 cattle and 200 sheep, and from Apr. 1 to Nov. 15 to irrigate 18 acres, all uses in S½-NW¼ said Sec. 16.

31497—DeKalb Agricultural Assn., Inc., Box 523, Vernal, Ut. .0256 sec.-ft. from a well at a point S. 660 ft. and W. 660 ft. from NE Cor. Sec. 4, T10S, R22E. The water will be conveyed to an equalizing reservoir having a capacity of 3 ac.-ft., the height of dam being 4½ ft., inundating 1.6 acres in SW¼NE¼NE¼ said Sec. 4. The water is to be used for oil and gas well drilling in Secs. 29 to 34 incl., T9S, R22E, Secs. 3 to 6 incl., 8, 10, T10S, R22E.

31534—Eugene R. McLean, R No. 1, Vernal, Ut. .1 sec.-ft. from a 1½-in. well 25 ft. deep at a point S. 1591 ft. and W. 375 ft. from NE Cor. Sec. 7, T4S, R21E. The water is to be used from Apr. 15 to Oct. 30 to irrigate 1 acre in NE¼SE¼NE¼ said Sec. 7.

31535—Eugene R. McLean, RFD No. 1, Vernal, Ut. .1 sec-ft. from a 1½-in. well, 25 ft. deep at a point S. 1657 ft. and W. 151 ft. from NE Cor. Sec. 7, T4S, R21E. The water is to be used from Apr. 15 to Oct. 30 to irrigate ½ acre in NE¼SE¼NE¼ said Sec. 7

To Appropriate:

29871 — United States of America, Dept. of the Interior for Dinosaur National Monument, % Director, National Park Service, Washington 25, D. C., .111 sec.-ft. from Subsurface flow of Green River, trib. to Colo. River at a point S. 37 degrees 52' 40" E. 1038.-9 3ft. from NW Cor. Sec. 35, T4S, R23E. The water will be diverted from a 24-in. diameter dug well bet. 0 and 30 ft. deep and conveyed through pipe line for the domestic requirements of 24 families, 10,000 visitors, fire protection, sanitation, and irrigation of 2 acres in Dinosaur National Monument.

31354—Lorenzo S. and Wilda T. Samuels, Route 2, Vernal, Ut. .1 sec.-ft. from a 4-in. well bet. 20 and 150 ft. deep at a point N. 99 ft. and W. 370.4 ft. from S¼ Cor. Sec. 22, T4S, R21E. The water is to be used from Apr. 15 to Oct. 15 to irrigate 1 acre in SW¼SE¼SW¼ SE¼SW¼-SW¼ said Sec. 22.

31369—LeGrande Hadlock, Box 178—Vernal, Ut. .015 sec.-ft. from a 6-in. well bet. 30 and 40 ft. deep at a point N. 99 ft. and W. 2351.50 ft. from E¼ Cor. Sec. 28, T4S, R21E. The water is to be used for the domestic requirements of one family in SW¼SW¼-SE¼ said Sec. 28.

31371—Elmer Lind, RFD No. 1, Vernal, Ut. .10 sec.-ft. from a 2-in. well, 26 ft. deep at a point S. 1747 ft. and E. 45 ft. from N¼ Cor. Sec. 17, T4S, R21E. The water is to be used for the domestic requirements of 2 families, for the watering of 50 sheep and 2 cows, and from Apr. 15 to Nov. 15 to irrigate 3 acres, all uses in W½SW¼NE¼ said Sec. 17.

31385—Adrian R. Kump, Lapoint, Ut. .015 sec.-ft. from a 6-in. well, bet. 50 and 100 ft. deep at a point N. 75 ft. and W. 405 ft. from S¼ Cor. Sec. 8, T1S, R2E, USB&M. The water will be used for the domestic requirements of one family, and from Apr. 1 to Oct. 31 to irrigate ¼ acre, all uses in SE¼SE¼SW¼ said Sec. 8.

31392—Dan L. Oaks, P. O. Box 372, Vernal, Ut. .1 sec.-ft. from a 7-in. well bet. 20 and 30 ft. deep at a point N. 22 ft. and W. 230 ft. from E¼

31536—Lawrence Adams, Route No. 1, Vernal, Ut. .1 sec.-ft. from a 1¼-in. well, 24 ft. deep at a point S. 1676 ft. and W. 169 ft. from NE Cor. Sec. 7, T4S, R21E. The water is to be used for the domestic requirements of one family, and from Apr. 15 to Oct. 30 to irrigate .5 acre, all uses in NE¼SE¼NE¼ said Sec. 7.

31810—D. Glen Davidson, Rt. 1, Box 487, Vernal, Ut. .015 sec.-ft. from a 6-in. well, bet. 30 and 100 ft. deep at a point N. 1359 ft. and W. 160 ft. from E¼ Cor. Sec. 11, T4S, R21E. The water will be used for the domestic requirements of one family, and from Apr. 1 to Oct. 31 to irrigate ½ acre, all uses in SE¼NE¼NE¼ said Sec. 11.

31812—Reed G. Bills, 2850 So. 20th East, Salt Lake City, Ut. .01 sec.-ft. from an unnamed spring at a point N. 100 ft. and E. 3050 ft. from SW Cor. Sec. 9, T1S, R21E. The water is to be used from May 1 to Nov. 1 for the domestic requirements of 4 persons, and for mining and milling of ore, all uses in E½NW¼ Sec. 16, T1S, R21E.

Protests resisting the granting of any of the foregoing applications with reasons therefor, must be filed in duplicate with the State Engineer, 403 State Capitol, Salt Lake City 14, Utah, on or before June 11, 1960.

WAYNE D. CRIDDLE
State Engineer.

Published in Vernal Express, Vernal, Utah, from April 28 to May 12, 1960.

01-11-1960: letter to gretchen mc clintock secretary regarding united states postal money order no. 8-59,537,400

L54 Dino

Dinosaur National Monument
Box 621 - Vernal, Utah

January 11, 1960

REG. DIRECTOR
ASST. REG. DIRECTOR
CHF. DIV. OF ADMIN.
CHF. DIV. OF OPERATIONS
CHF. DIV. OF INTERP.
CHF. REC. RES. PLANNING
CHF. RANGER ACTIVITIES
FIELD SOLICITOR
Matt M.D.
ACTION TAKEN None M.D.
FILE D 1/14/60

The State of Utah
Office of State Engineer
Salt Lake City, Utah

Attention: Gretchen Mc Clintock
Secretary, Application

Re: Application
No. 13209

Dear Madam:

In reference to your letter of December 31, 1959 to U. S. Department of the Interior, National Park Service, Region Two Office, Omaha 2, Nebraska, you will find attached United States Postal Money Order No. 8-59,537,400 in the amount of $25.00 in payment for advertising the extention on the above application.

We would appreciate a signed receipt for the above payment. The receipt may be sent to Superintendent. Dinosaur National Monument, Box 621, Vernal, Utah.

Yours truly,

Oscar T. Dick
Acting Superintendent

cc: Reg. Dir., Reg. Two

00-00-0000: request for extension of time

Form L29 010 5-49—Service Press

1/3/60

IN THE OFFICE OF THE STATE ENGINEER OF THE STATE OF UTAH

REQUEST FOR EXTENSION OF TIME
(After Fourteen Years)

APPLICATION NO. 13209

~~STATE OF UTAH~~ CITY OF WASHINGTON
~~COUNTY OF~~ DISTRICT OF COLUMBIA } ss.

A. van V. Dunn, being first duly sworn says that he is ~~the~~ the agent of the owner of the above numbered Application; that he knows of his own knowledge that the construction of works as contemplated by the Application was actually commenced within 1 month~~s~~ after the date of approval of the Application, and the work has since been prosecuted with diligence.

The nature, extent and approximate cost of construction work done to this date, together with a detailed statement of use to which the water has been put, is as follows: (Describe briefly the type and extent of construction, whether impounding or diversion dam, or diverting channels and give the cost of construction. Indicate what part of the water is now covered by this Application for [illegible] needed and the number of acres that can be irrigated. If [illegible] state the general character of work to be done and the [illegible] details as far as they can be given. If [illegible] actually been done.)

In accordance with Application No. 13209, a spring, N. 24°38' W 2746 ft. from S¼ Cor. Sec. 26, T. 4 S., R. 23 E., SLM, was developed and diverted to 500 gal. dist. reservoir by 716 ft. of 1" G.I. pipe about 1934 at cost of about $2,000 as temporary water supply for Quarry Headquarters of Dinosaur National Monument, as established by proclamation of October 4, 1915 (39 Stat. 1752).
The surface spring flow was inadequate for headquarters of Monument as enlarged by proclamation of July 14, 1938 (53 Stat. 2454). To comply with state water laws and provide additional water, Application No. 13209 was filed to claim waters of a spring area including said spring, and to establish the right to divert such water before it emerged on the surface. Said application designated a test well as tentative point of diversion N. 26°10' W. 2814 ft. from said S¼ Cor. Sec. 26, and described the spring area as beginning N. 23°39' E. 2729.45 ft. from said S¼ Cor. Sec. 26; thence N. [illegible] W. 150 ft.; thence S. 85°47' W. 150 ft.; thence S. 4°13' E. 200 ft.; thence N. 87°47' E. 200 ft.; and thence N. 4°13' W. 50 ft. to point of beginning. Part of the lines and courses were erroneously described and corrected before Application 13209 was accepted, but the point of beginning was not properly corrected, thus describing a spring area approximately 0.5 mile east of spring and test well. Request is hereby made that the description of said spring area be corrected to begin at point N. 23°39' W. 2729.45 ft. from said S¼ Cor. Sec. 26. Both correct and incorrect locations of spring area are within homogenous tract of Federal land within Dinosaur National Monument and drain to Green River with no intervening private land.
Said test well No. 1 was dug to depth of 73 ft. from surface elevation 5190 with approximately 110 ft. of horizontal, exploratory tunnelling at the bottom, all completed about July 1, 1952, at cost of $2,500. Water was found in tilted, coarse sandstone 55 ft. north of shaft, yielding only about the same flow of 0.01 sec.ft. available at the original spring, and reduced the spring flow to practically zero during pumping.
To explore the tilting aquifer at a lower depth, and simplify drilling, a new well site, No. 2, was selected N. 28°24' W. 2802 ft. from said S¼ Cor. Sec. 26, and about 20 ft. from well No. 1. Pending further drilling, a concrete collecting sump was provided at aforesaid spring and the 1" pipe was replaced with 2" G.I. pipe at approximate cost of $1,700.
Due to wartime limitations, the test well No. 2 was deferred until 1951. In that year, the well was drilled to depth of 168 ft. from surface elevation 5160, cased with 42' of 8 and 65' of 6 pipe, and bailed at 10 gpm, or 0.022 sec.ft. by Garnett Birchell, who is reported to be a licensed well driller, at a cost of $1,332.69.
Project no included spring flow diverted and used and satisfactory well No. 2, not connected to system, at total cost of about $7,533.

Request is made for an extension of time for filing proof from **January 6** , 1955 to **January 1** , 1960. (Last date for submitting proof cannot exceed 50 years from date of approval of Application.) Reasons why extensions should be granted are: (Give reasons why the work could not be completed and the water put to beneficial use within the time heretofore allowed and why conditions now will permit the completion of the works and filing of proof within the time requested. Be specific in statement.

Congress and Bureau of the Budget have repeatedly reduced requested annual appropriations for construction in national parks and monuments since 1942 as war time and post-war economy measures. Appropriations for fiscal year 1955 and budget for fiscal year 1956 are already fixed for same reasons, with no provision for said project, although annual visting public served by water system has increased from 9133 in 1941 to 65,996 in 1954. Although emergency budget request is being submitted for 1956 fiscal year, full construction and use cannot be anticipated before about 1960.

Affiant upon oath states that he or the owner of the Application, whom he represents, has a bona fide intention and the financial ability to complete the works and to apply the water to beneficial use as provided in the Application, within the period of extension requested. ~~$15.00~~ not $ 20.00 is tendered herewith for publishing notice to water users, The charge will be paid on receipt of bill after publication per State Engineer's letter of December 28, 1954.

A. van V. Dunn
Chief, Water Resources Section Applicant
National Park Service
(If applicant is a corporation, specify the title of the officer making the affidavit and affix corporate seal.)

Subscribed and sworn to before me this 3rd day of January 1955.

Lorin A. Davis
Notary Public, D. C. Notary Public
My Commission Expires November 14, 1956

NOT TO BE FILLED IN BY APPLICANT

Application No. _____ Request due _____ Recd. _____
Applicant _____
Source _____
50 year period ends _____ Adv. fee ~~$15.00~~ $20.00 Recd. _____ by _____
Receipt No. _____
Hearing set for _____ at _____
Notice published weekly in _____
Beginning _____ and ending _____
Extension protested by _____

Request for extension approved / rejected ; time for submitting proof is hereby extended from _____ to and including _____

_____ Date

_____ STATE ENGINEER

FORM 29 2M 3-59

IN THE OFFICE OF THE STATE ENGINEER OF THE STATE OF UTAH

Request for ~~Reinstatement and~~ Extension of Time

(Strike words not needed)

(AFTER FOURTEEN YEARS)

APPLICATION NO. 13209

STATE OF UTAH
COUNTY OF Uintah } ss.

Jess H. Lombard, Superintendent, being first duly sworn says that he is the owner or the agent of the owner of the above numbered Application; that he knows of his own knowledge that the construction of works as contemplated by the Application was actually commenced within __ months after the date of approval of the Application, and the work has since been prosecuted with diligence.

The nature, extent and approximate cost of construction work done to this date, together with a detailed statement of use to which the water has been put, is as follows. (Describe briefly the type and extent of construction, whether impounding or diversion dam, or diverting channels and give the cost of construction. Indicate what part of the water, if any, covered by this Application has been put to beneficial use, the number of acres irrigated, etc. Mere statements as to general character of works, costs and use will not answer—give details sufficient for one to determine what has actually been done.)

--SEE ATTACHED--

ATTACHMENT NO. 1

The nature, extent and estimated cost of construction remaining to be done to complete the work in accordance with the Application follows: (Describe with same details as required last above.)

It will be necessary to supplement the spring water with another supply of satisfactory quality and quantity before the most advantageous use can be made of the spring supply. Otherwise, dual distribution systems would be necessary to separate the water for domestic use from the sanitary and operational uses in the Quarry Area.

(OVER)

with letter of Dec 28, 1959 to State Engr. Cap 1/11/60

Request is made for an extension of time for filing proof from January 1, , 1960, to January 1 , 1965 . (Last date for submitting proof cannot exceed 50 years from date of approval of Application.) Reasons why extensions should be granted are: (Give reasons why the work could not be completed and the water put to beneficial use within the time heretofore allowed and why conditions now will permit the completion of the works and filing of proof within the time requested. Be specific in statement

--SEE ATTACHED--

ATTACHMENT NO. 2

Affiant upon oath states that he or the owner of the Application, whom he represents, has a bona fide intention and the financial ability to complete the works and to apply the water to beneficial use as provided in the Application, within the period of extension requested. $25.00 is tendered herewith for publishing notice to water users.

Jess H. Lombard, Supt.
Dinosaur National Monument
National Park Service Applicant
(If a corporation, specify the title of the officer making the affidavit and affix corporate seal.)

Subscribed and sworn to before me this 28th day of December 1959

Jesse R. Hall
Notary Public

NOT TO BE FILLED IN BY APPLICANT

Application No._____ Request due_____ Recd._____
Applicant_____
Source_____
50 year period ends_____ Adv. fee $25.00 Recd._____ by_____
Receipt No._____
Hearing set for_____ at_____
Notice published weekly in_____
Beginning_____ and ending_____
Extension protested by_____

Request for extension approved / rejected ; time for submitting proof is hereby extended from_____ to and including_____

Date

STATE ENGINEER

In accordance with application No. 13209, a spring, N. 24° 38' W. 2746 ft. from S¼ corner, Sec. 26, T. 4 S., R. 23 E., SLM was developed and diverted to 500 gal. dist. reservoir by 716 ft. of 1" G.I. pipe about 1934 at cost of about $2000 as temporary water supply for Quarry Headquarters of Dinosaur National Monument, as established by proclamation of October 4, 1915 (39 Stat. 1752).

The surface spring flowwas inadequate for headquarters of the Monument as enlarged by proclamation of July 4, 1938 (53 Stat. 2454). To comply with State water laws and provide additional water, application No. 13209 was filed to claim waters from a spring area including said spring, and to establish the right to divert such water before it emerged on the surface. Said application designated a test well as tentative point of diversion N. 28° 10' W. 2814 ft. from said S¼ corner, Sec. 26; and described the spring area as beginning N. 23° 39' W. 2729.45 ft. from said S¼ corner, Sec. 26; thence N. 4° 43' W. 150 ft.; thence S. 85° 17' W. 350 ft.; thence S. 4° 43' E. 200 ft.; thence N. 85° 17' E. 350 ft.; and thence N. 4° 43' W. 50 ft. to point of beginning. The entire spring area is within homogenous tract of Federal land within Dinosaur National Monument and drains to Green River with no intervening private land.

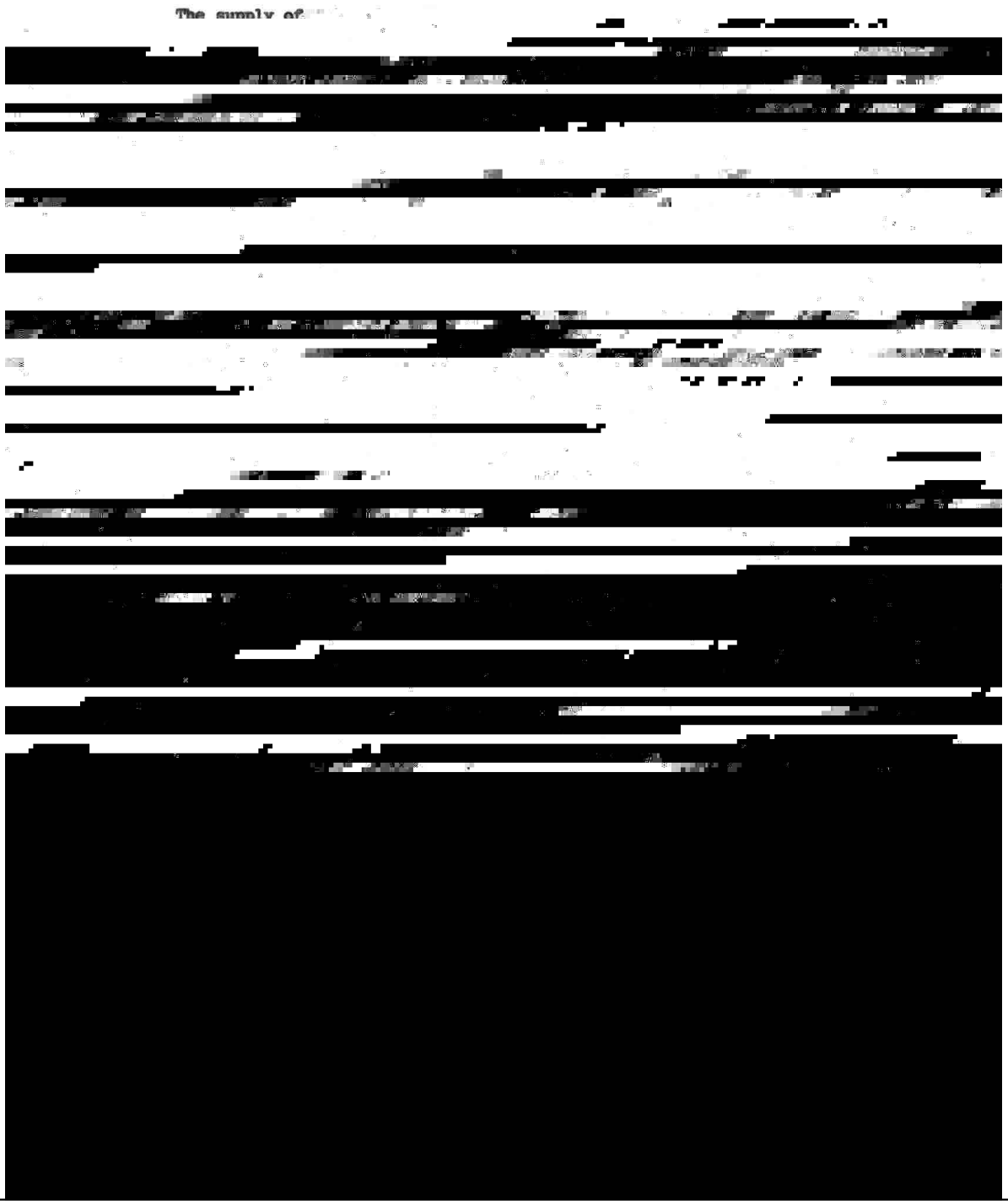
Test Well No. 1 was dug to a depth of 73 ft. from surface elevation 5190 ft. Water was found in a coarse sandstone, yielding only 0.01 sec. ft., approximately the same flow as available at the original spring. When the well was pumped the spring flow reduced practically to zero. Pending further drilling, a concrete collecting sump was provided at aforesaid spring and the 1" pipe was replaced with 2" G.I. pipe at approximate cost of $1700.

To explore the aquifer at a lower depth, and simplify drilling, a new well site No. 2 was selected, N. 26° 37' W. 2715 ft. from said S¼ corner, Sec. 26. In 1951 Well No. 2 was drilled to a depth of 168 ft. from surface elevation 5160 ft., cased with 42' of 8" and 65' of 6" pipe, and bailed at 10 gpm, or 0.022 sec. ft. by Garnett Birchell, reported to be a licensed well driller, at a cost of $1332.69.

Project now includes spring flow diverted and used and well No. 2 drilled but not connected to system at a total cost of about $7533.

The water from the spring has been limited to the domestic uses in the employees' residences as it is the most potable supply available. It is necessary that further investigations be made for a potable supply that may be used throughout the distribution system.

ATTACHMENT No. 1


The supply of

00-00-0000: application to appropriate water for miscellaneous purposes

Form 115 9-52 1500

Application No. 13209-Amended

Application to Appropriate Water for Miscellaneous Purposes
STATE OF UTAH

Do not fill out this blank until you have read carefully and thoroughly understand the Rules and Regulations on the back hereof and all notes in the body of it, as well as the rules and regulations in pamphlet form promulgated by the State Engineer.

This blank not to be used if the main purpose is for Irrigation, Power, Mining, Stock-Watering or Domestic Purposes.

For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, for domestic, recreational and fire protection *purposes, application is hereby made to the state engineer, based upon the following showing of facts, submitted in accordance with the requirements of the Laws of Utah.*

Note.—The information given in the following blanks should be free from explanatory matter, but when necessary a complete supplementary statement should be made on the following page under the heading "Explanatory."

1. *The name of the applicant is* The United States of America
2. *The post office address of the applicant is* National Park Service, Interior Building, Washington 25, D. C.
3. *The quantity of water to be appropriated is* 0.02 *second-feet or* -- *acre-feet* (See note on page 4)
4. *The water is to be used each year from* January (Month) 1 (Day) *to* December (Month) 31 (Day) *incl.,*
   and stored each year (if stored) from -- (Month) -- (Day) *to* -- (Month) -- (Day) *incl.,*
5. *The drainage area to which the direct source of suppy belongs is* (Leave blank)
6. *The direct source of supply is*† a spring area (Name of stream or other source)
   which is tributary to Green River, *tributary to* Colorado River

†**Note.**—Where water is to be diverted from a well, a tunnel, or drain, the source should be designated as "Underground Water" in the first space and the remaining spaces should be left blank. If the source is a stream, a spring, a spring area, or a drain, so indicate in the first space, giving its name, if named, and in the remaining spaces, designate the stream channels to which it is tributary, **even though the water may sink, evaporate, or be diverted before reaching said channels.** If water from a spring flows in a natural surface channel before being diverted, the direct source should be designated as a stream and not a spring. (See note on page 4.)

7. *The point of diversion from ~~stream, spring~~, spring area, ~~drain, well (flowing or pump), tunnel~~,* (Strike words not needed)
   ~~of~~ is in Uintah *county, situated at a point**
   (1) at main spring N24°38' W 2746 ft. from S¼ Cor. Sec. 26;
   (2) at well No. 2 intercepting underground source of spring N28°24' W2802 ft. from S¼ Cor. Sec. 26, both T 4 S, R 23 E, SLM (Well No. 1, N28°10' W 2814 ft. from ~~said S¼ Cor. Sec. 26 being abandoned~~)

*Note.—The point of diversion must be located definitely by course and distance or by giving the distances north or south, and east or west with reference to a United States land survey corner or United States mineral monument, if within a distance of six miles of either, or if at a greater distance, to some prominent and permanent natural object. (Also see note on page 4.)

No Application will be received in which the point of diversion is not described definitely. Any change made in this description after Application is received and before approved will bring down the priority of Application to the date when the amendment is made of record in the state engineer's office.

8. *The diverting and carrying works will consist of* collecting box at spring, well, pump, and 4" G.I. Pipe to 100,000 gal. concrete distribution reservoir.

P655

9. *The cross section of the diverting channel will be* ~~U~~ ~~V~~ ~~W~~ O 4* (Strike ones not needed)
10. *The diverting works and diverting channel will be constructed of ~~earth, mud~~, iron, concrete.* (Strike words not needed)
11. *The length of the diverting channel, exclusive of laterals, will be* 1600 *feet*
12. *The top width of the diverting channel will be (if a ditch)* -- *feet*
13. *The bottom width of the diverting channel will be (if a ditch)* -- *feet*
14. *The depth of water in the diverting channel will be (if a ditch)* -- *feet*
15. *The width of the diverting channel will be (if a flume)* -- *feet*
16. *The depth of water in the diverting channel will be (if a flume)* -- *feet*
17. *The diameter of the diverting channel will be (if a pipe)* 4 *inches*
18. *The grade of the diverting channel will be* control 20 *feet per thousand*
19. *The purposes for which the water is to be used are* domestic, recreational and fire protection

This will consume 0.02 *second-feet of the water and* 0.002 *second-feet will be returned to the natural stream or source at a point described as follows:* (*See note under No. 7*) 0.01 sec.ft., or total flow of spring, now used. Initial well yield 0.022 sec.ft. of which 0.020 sec.ft. claimed to extent not diverted from spring.

CC forwarded to Rg Two
Nov. 1959

EXPLANATORY

The following additional facts are set forth in order to define more clearly the full purpose of the proposed appropriation. (If additional space is required under this paragraph, sheets cut to same size as this form folded should be added, identified as "Explanatory Continued")

Initial diversion prior to 1940 was from aforesaid spring in bottom of ravine, and subject to pollution or contamination from surface run-off during storms. Exploration and development of spring revealed that water emerged from porous sand and sandstone on steep tilt along side of ravine. Original Application 13209 was filed in 1940 to claim water source in spring area beginning N23°39'W (erroneously stated as N23°39'E) 2729.45 ft. from S¼ Cor. Sec. 26, T 4 S, R 23 E, SLM; thence bounded by courses N4°43'W 150 ft; S85°17'W 350 ft; S4°43'E 200 ft; N85°17'E 350 ft; and N4°43'W 50 ft. to point of beginning. To include spring, as obviously intended, point of beginning must be N23°29'W 2729.45 ft. from said S¼ Cor. Sec. 26. Test well No. 1 was dug to depth of 73 ft. and tunnel drifted into bank intercepted spring flow, but with no increase in flow. Test well No. 2 drill to depth of 168 ft. intercepts same source of lower depth and yields more than authorized 0.02 sec.ft.

Claim is made to 0.02 sec.ft. of source of spring at point of emergence or at well No. 2, or both. The water is used for domestic purposes in the residences and offices of the custodian and other permanent employees, and in camps of construction, maintenance and archaeological crews; for the normal purposes in machine shops, garages and a blacksmith shop; for the sanitary facilities in public comfort stations; anf for fire protection. Any limited picnicking, restaurant facilities, or camping will be secondary to preceding operating and administrative needs which are expected to require total available water supply.

Since well No. 2 does not provide storage of shaft and tunnel of well No. 1, and storage at spring collecting sump will be abandoned if well No. 2 proves adequate, regulatory storage of 100,000 gallons may be necessary at lower end of diversion pipe, and may be located higher on hill to increase fire protection pressure. Pump of at least 15 gpm will deliver well water and possibly spring water to distribution reservoir through 1600 ft. 4" G.I. pipe, or less.

Existing water supply served employees and 9133 visitors in 1941 and employees and 65,996 visitors in 1954 but in inadequate amounts due to low natural spring flow and water using facilities.

A. van V. Dunn *Signature of Applicant**
Chief, Water Resources Section
National Park Service
Department of the Interior

*If applicant is a corporation or other organization, signature must be in the name of such corporation or organization by its proper officer. If a corporation, the affidavit below need not be filled in. If there are more than one applicant, a power of attorney, authorizing one to act for all should accompany the Application.

~~STATE of UTAH.~~
District of Columbia } ss.
County of ——

On the 4th day of January, 19 55 personally appeared before me, a notary public ~~for the State~~ in and for the ~~of Utah~~, District of Columbia, the above applicant who, on oath, declared that he is a citizen of the United States.

My Commission expires
(SEAL)

Notary Public, D. C.
My Commission Expires November 14, 1956

Florine A. Davis
Notary Public.

(This page is not to be filled in by applicant)

State Engineer's Endorsements

1. 9:30 a.m. Jan. 6, 1955 *Application received* ~~over counter~~ / *by mail* *in state engineer's office by* Eca
2. *Priority of Application brought down to, account of*
No fee required
3. *Fee for filing Application, $*....., *received by*..... *Rec. No*.....
4. *Application copied in book*....., *page*....., *and indexed by*.....
5. *Application platted by*.....
6. *Application examined by*.....
7. *Application returned, with letter, to*..... *for correction*
8. *Corrected Application resubmitted* *over counter* / *by mail* *to state engineer's office.*
9. *Fee for publishing notice requested.*
10. *Fee for publishing notice, $*....., *received by*..... *Rec. No*.....
11. *Application approved for advertisement by* .....
12. *Notice to water users prepared by* .....
13. *Publication began; was completed* .....
Notice published in.....
14. *Proof slips checked by*.....
15. *Application protested by*.....
16. *Application designated for* *approval* / *rejection* *by*.....
17. *Fee for approving Application requested* .....
No fee required
18. *Fee for approving Application, $2.50 received by*..... *Rec. No*.....
19. *Application proofread by*.....
20. *Application* *approved* / *rejected* *and returned to applicant*.....

This application is approved, subject to prior rights, if any, on the following conditions:

1. *That actual construction work shall be diligently prosecuted to completion.*
2. *That Proof of Appropriation shall be submitted to the state engineer's office by*.....
3. .....

State Engineer.

21. *Time for making Proof of Appropriation extended to*.....
22. *Proof of Appropriation submitted.*
23. *Fee for filing Proof of Appropriation, $1, rec. by*..... *Rec. No*.....
24. *Fee for exam. maps, profiles and drawings, $5, rec. by*..... *Rec. No*.....
25. *Fee for issuing Cert. of Appropriation, $1, rec. by*..... *Rec. No*.....
26. *Certificate of Appropriation, No*....., *issued.*

I Hereby Certify that the foregoing is a true copy of the Application by.....
to appropriate water and of the endorsements therein as shown by the records of my office on the date given below.

Salt Lake City, Utah, ...,19.....

.....
State Engineer

Application No.....

NOTICE TO APPLICANT

The approval of this Application is not a Certificate of Appropriation. It is merely your authority to begin construction work, which must be prosecuted diligently to completion. To secure a Certificate of Appropriation under this Application, Proof of Appropriation must be submitted within the time limit allowed by the state engineer. The amount of water for which Certificate will be issued will depend upon the amount of water actually put to a beneficial use, not to exceed, however, the amount of water specified in this Application. Proof of Appropriation must be made in accordance with the requirements of the law. For further information write the state engineer.

Note.—The second space provided in Paragraph 3 on page 1 must not be used except in cases in which storage is contemplated; in such case Paragraph 4 (first line) should indicate the time in each year during which the water will be released and used. The lands to be inundated by the reservoir shall be described under "explanatory" as nearly as may be and by government subdivisions if upon surveyed lands, and the area of the reservoir when at full stage shall be given in acres.

If the Reservoir is Located on the Channel of the Source from which the water is to be appropriated, it shall be so stated under "explanatory," and—

1. The intersection of center line of stream bed and longitudinal axis of impounding dam shall be described in Paragraph 7.
2. The point where the released storage will be rediverted from the natural stream shall be described under "explanatory" in accordance with the note under Paragraph 7. If a diversion dam is involved, the point of rediversion is intersection of center line of stream bed and longitudinal axis of dam.

When Water is not Stored in the Natural Channel of the Source from which it is to be appropriated, it shall be so stated under "explanatory," and—

1. The point of diversion from the supplying source shall be described in Paragraph 7.
2. The intersection of center line of stream bed and longitudinal axis of impounding dam and the point where the released storage will be rediverted from a natural channel shall be described under "explanatory" in accordance with the note under Paragraph 7. If a diversion dam is involved the point of rediversion is intersection center line of stream bed and longitudinal axis of dam.

In all cases Paragraphs 8 to 18, inclusive, shall describe the entire diverting works, exclusive of natural channels and laterals, even if already constructed in whole or in part.

If Application is Made for the Water of a Number of Springs, or other sources collected at a common point, said point shall be described as the point of diversion in Paragraph 7 and the point of diversion from each source shall also be described under "explanatory," in accordance with the note under Paragraph 7. The quantity of water sought from each source shall be indicated under "explanatory," the total equaling the quantity specified in Paragraph 3. Where the source of supply is in reality a spring area, the point of diversion is the point where the water is collected within the area, the point of collection being described in Paragraph 7; in such case the exterior boundary of the spring area shall be described under "explanatory" by metes and bounds and located as outlined by the note under Paragraph 7.

Rules and Regulations

If a dam is not required across the natural channel of the stream or outlet of the lake comprising the supplying source to divert water into the diverting channel, the point of diversion or rediversion shall be the intersection of the axis of the first tangent in the diverting channel and the high water line on the adjacent side of the natural channel or body of water of the supplying source.

All waters in this state, whether above or under the ground, are the property of the public, subject to all existing rights to the use thereof. No appropriation of the unappropriated public water may be made and no rights to the use thereof shall be recognized except Application for such appropriation first be made to the state engineer.

The Application must be signed by the applicant at the bottom of page 2 and the affidavit relating to citizenship acknowledged before a notary public before the Application be received by the state engineer.

An application shall not be made for more than one purpose, except where the secondary purpose is a necessary incident to the primary one; as for instance, an Application for irrigation purposes may specify domestic purposes as a necessary incident.

An Application made to appropriate water for use in a single system with one or more points of diversion or sources of supply, or both, if the water is commingled, may be accepted if made by one person or by a corporation, if and when the points of diversion be in close proximity or located in contiguous sections by government survey; provided, however, that the quantity of water sought, also tie to a U. S. land survey corner, be given for each point of diversion, and the point of commingling given by tie to a U. S. land survey corner.

In case a material error is made in the description of the point of diversion, or in case any error is made the correction of which would enlarge the rights sought in an Application after its receipt in the state engineer's office, then such error may be corrected before advertising, but the priority date of the Application will be changed to the time when the corrected Application is resubmitted (received) in the state engineer's office; and, if the notice to water users has been published, the state engineer may in his discretion, before approval, cause a revised notice to be published at the expense of the applicant.

When there are two or more coapplicants the Application must be accompanied by a power of attorney authorizing one to act for all.

The applicant's permanent address should be given in Paragraph 2, and the state engineer notified promptly of any change in address; otherwise applicant may lose rights initiated by Application by failing to receive notices sent from the state engineer's office.

No Application or other paper (requiring a fee) pertaining to an Application will be marked received unless accompanied by the required filing fee.

Applications accepted and numbered by the state engineer, when returned to applicant for correction or additions, must be amended with red ink. Erasures must not be made, but any matter may be eliminated by running a red line through it in such a manner that the stricken matter may still be read. Corrected Applications must be resubmitted to the state engineer's office, within sixty days from the date of state engineer's letter returning Application for correction; otherwise the Application will lapse.

Applicants will be informed by the State engineer's office when cost of publishing notice of Application is due, and must advance cost within sixty days after date of notice, otherwise Application will lapse.

Fees Required by Law Payable to State Engineer

For filing Application to appropriate 10 second-feet of water or less and additionally, $1.00 for each second-foot above 10.	$2.50
For filing Application to appropriate 500 acre-feet of water or less and additionally, 2 cents for each acre-foot above 500.	2.50
When the filing fee on any Application to appropriate water shall exceed $1,000.00, the balance of the fee in excess of $1,000.00 may, at the option of the applicant, be paid at time the Proof of Appropriation is submitted.	
For approving and recording completed Application	2.50
For filing written Proof of Appropriation	1.00
For examining maps, profiles and drawings that are part of the Proof of Appropriation	5.00
For issuing Certificate of Appropriation	1.00

NOTE.—Applicants will save time and expense by familiarizing themselves with the law before making Application.



L-54

NOV 17 1958

WESTERN OFFICE
DESIGN & CONSTRUCT
NOV 24 1958A
CHIEF
ADMIN.ASSIST.
PERSONNEL
PLANS & PROG.
SAFETY
ARCHITECT
ENGINEER
LAND. ARCH.
ACTION TAKEN—DATE
None

Memorandum

To: The Director

From: Hydraulic Engineer, Region Two

Subject: Investigation of Potential Water Supplies for Headquarters Development and Analyses of the Present Quarry Headquarters Supply, Dinosaur National Monument

On September 29, 1958, a reconnaisance trip over the Split Mountain Gorge Campground, the Quarry Headquarters supply system and the proposed site of the new headquarters development near Artesia, Colorado, was made in company of Superintendent Jess Lombard; Geologist representative of the Geological Survey, Salt Lake City, Utah; Neil Grunigan, Engineer from WODC; and, Oscar Dicks, Chief Ranger.

While the investigation was to cover the potential of water supplies at the Quarry Headquarters, Split Mountain Gorge Campground site, Pat's Hole and Lodore, Mr. Lombard said that the priority of the investigation should be given to the Quarry Headquarters water supply and the new headquarters development near Artesia, and that our efforts should be centered about these systems. Mr. Lombard also indicated that the development in Pat's Hole would follow in priority but is not programmed until 1960, or later. To this order of priority I concurred and it was so pursued. We had planned to visit Pat's Hole area but were unable to do so at this time.

The development of the water supply at Split Mountain Gorge Campground, consisting of two wells each equipped with hand pumps, has been completed, and each has a concrete slab sealed around the top of the casing. We have in our water records a copy of a "Record of Well" that indicates that one well had been pumped at the rate of 20 gpm for 4 hours. Mr. Grunigen questions the yield of the well and said that he did not believe the well would deliver more than 9 gpm. There was no way by which we could observe the elevation of the water surface in the well. In case the wells are equipped with pressure system they should be test pumped again and determine their actual yield.

The present water supply for the Quarry Headquarters is of unsatisfactory quality, and it is desired that a better water supply be developed for domestic use at the Quarry Headquarters.

North of the Visitor Center is a spring that has been developed with a concrete collection basin and sealed over the top with a concrete slab in an attempt to prevent pollution caused by the spring run-off that passes down the nearby draw. This spring issues from a water bearing stratum. The possibilities of drilling a well and intercepting the spring might offer one solution to avail of water suitable for domestic use.

Another spring up Orchard Canyon was investigated as to flow and a sample of water taken for purpose of chemical analysis.

Near the new headquarters development, near Artesia, is located the water well supply of the town of Artesia. This offers a good possibility of development of a water supply from the same strata as the town supply. Mr. Smith availed of samples of the Artesia water wells and of the various springs in the Quarry area and will submit a chemical analysis of same with his report.

Through contacts with the officials of the town of Artesia it was learned they expect to drill a third well to supply their needs, and indicated their willingness that they would be glad to supply the Park Service with water for the new headquartersdevelopment.

In conclusion, it is believed that an ample supply of water will be available at the development in Artesia. To supply water for domestic use at the Quarry Headquarters may involve the development of a separate supply for this purpose. We are awaiting the report from Mr. R. E. Smith.

(Sgd.)

William A. Mott
Hydraulic Engineer

In duplicate

Copy to: Chief, WODC (2)
Supt., Dinosaur NM

L54-L

April 21, 1958

Mr. Wayne D. Criddle
State Engineer
State Capitol
Salt Lake City, Utah

Dear Mr. Criddle: Re: UNNUMBERED APPLICATION AND APPLICATION NO. 13209

Enclosed is our unnumbered application for the appropriation of subsurface flow of the Green River at Dinosaur National Monument. This has been corrected in red and signed, in accordance with the letter of April 10 from Mr. J. M. Gardner.

Mr. Gardner's letter suggests thatthe procedure for filing may have been changed since we obtained our last copy of your Rules and Regulations, which was dated June 1, 1947, and contained hand lettered editing to July 1949, when it was supplied by Mr. Linke. Please supply us with your latest edition.

The lack of signature, when the application was filed in July 1957, may have resulted from my confusing different procedures for applications and proofs. It was my understanding that either type of instrument was to be submitted for your review before being signed.

Sincerely yours,

SIGNED

A. van V. Dunn
Chief, Water Resources Section

Enclosure

Copy to: Regional Director, Region Two
Superintendent, Dinosaur
Chief, WODC (2)
Mr. Dunn - with copy of incoming

AvanVDunn:lt

COPY

THE STATE OF UTAH
OFFICE OF STATE ENGINEER
SALT LAKE CITY 14

WAYNE D. CRIDDLE
State Engineer

April 10, 1958

The United States of America
Department of the Interior
Dinosaur National Monument
c/o Director, National Park Service
Washington 25, D. C.

Gentlemen:

RE: UNNUMBERED APPLICATION AND
APPLICATION NO. 13209

On July 13, 1957, this office received your letter dated July 9, 1957, transmitting an application for supplemental appropriation of the underground flow of the Green River in the Dinosaur National Monument. This application was to supplement the water covered by Application No. 13209, and was filed in accordance with a letter to you on March 16, 1955. This Unnumbered Application was inadvertently misplaced and, therefore, was not received by this office.

On examination of the Unnumbered Application it is noted that it was not properly signed by the applicant and is, therefore, being returned to you herewith. Before resubmitting the application, it is recommended that the following amendments and corrections be made therein.

Paragraph 6: The direct source of supply is designated as "Underground flow of Green River". Please correct this to read "Subsurface Flow of Green River".

Paragraph 8: In addition to the information given therein, please add the following statement, "The well is to be dug between 0 and 30 ft., and cased with 24-inch diameter pipe and conveyed through 3940 ft. of 8 ft. and 6" diameter pipe to the place of use."

Paragraph 11: You should designate the total depth of the well plus the length of the conveyance system from the well to the place of use. Please amend this to read "3970 ft."

Paragraph 17: Please add 30 ft. of 24 inch.

Paragraph 18: Please amend this paragraph to read, "The grade of the diverting channel will be vertical and horizontal.

Paragraph 19: It is recommended that you strike the reference to the amount of water that will not be consumed as your uses are considered as consumptive uses.

Explanatory: Strike the last sentence referring to the points of return flow of the first paragraph. Also it will be necessary to give the maximum number of persons who will use the water at any one time rather than define the use by the annual visitors or monthly visitors. Define the other

United States of America
4/10/58

miscellaneous uses to which the water will be used to show the uses at the Quarry utility area. If the water is to be used in the fire protection system, please so state, or if it is to be used for industrial purposes in a cafe or motel, if such a one exists, please so state, and give the place of use of all uses by section, township and range, or legal subdivisions thereof. Please add the following statement: "The quantity of water sought to be appropriated is limited to that which can be beneficially used for the purposes herein described."

Please have Jackson E. Price execute the application at the bottom of page two.

Yours truly,

/s/ J. M. Gardner

J. M. Gardner
SENIOR APPLICATION ENGINEER.

JMG/ig
Enc: Unnumbered application

L-54-L

Dinosaur National Monument
Box 621, Vernal, Utah

April 4, 1958

WESTERN DESIGN & CO
APR 7
CHIEF
ADMIN.ASS
PERSONNEL
PLANS & PR
SAFETY
ARCHITECT
ENGINEER
LAND. ARCH.
ACTION TAKEN
See 4/2/58
Memo to
by SMITH, RNGR.

Memorandum

To: Regional Director, Region Two

From: Superintendent, Dinosaur National Monument

Subject: Water Rights for Well 3, Quarry Headquarters - Docket 1, Dinosaur National Monument

This is an answer to Mr. Aiton's Memorandum of April 1, 1958 referring to Mr. Dunn's Memorandum of March 26, 1958.

We have no record of the Utah State Engineer ever having acknowledged Mr. Dunn's application submitted on July 9, 1957.

The attached itemized cost sheet for the water taken from the Completion Report on Contract No. 14-10-232-164, Water and Sewer System, gives a great deal of information on the water system but does not indicate the cost or description of the pump and power unit. The pump and electric motor power unit is included in Item 3, One each pump house at $3,340.97 plus an additional $1,427.03 in Item No. 4 of Change Order No. 2. This totals $4,768.00 for the pump house and pump with integral electric motor power unit. A picture of the Fairbanks Morse pump and motor is in the Completion Report copies of which are in your office and WODC. We have no knowledge in this office of what part of the $4,768 was for the pump. From the literature in the files, the pump is the Fairbanks Morse "Pomona Little Chief," turbine type (Serial No.TV.7095) as described in Bulletin 6980-1 Figure 6980. See the attached performance chart and Bulletion 6980-1. There is a 7½ h.p. motor directly connected to the pump shaft. The motor operates on 220/440 V., 60 cycle, 3 phase electric power. See Item 4-e, of Change Order No. 2 dated October 29, 1956.

Mr. Dunn is right in assuming there will be in excess of 200,000 people per year visit the Quarry Area by 1970. In our MISSION 66 we estimated between 3 and 4 hundred thousand for the Monument in general.

Point No. 3 in Mr. Dunn's Memorandum of February 13 asks about the spring and old water line. He is definitely correct in showing the new line independent of the old one. We do not plan on

any emergency cross connections. We do wish to retain use of the spring and the old pipe line to furnish drinking water of better quality than the new system furnishes. The employees haul water in 5-gallon carboys from an outside riser and hose bibb on the old water system for use in their homes for drinking. We hope that the water in the new system will improve in quality but it's still pretty bad.

Perhaps R. Neil Grunigen in WODC can remember the cost of the pump and power unit that make up the Item No. 4, Pump House in the contract, if it is that important.

Jess H. Lombard
Superintendent

in tripl.
cc: WODC

04-02-1958: memorandum to regional director regarding water rights for well 3, quarry headquarters

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WESTERN OFFICE, DESIGN AND CONSTRUCTION
[illegible] STREET, SAN FRANCISCO 3, CALIFORNIA

IN REPLY REFER TO:
L 54

REGIONAL DIRECTOR
ASSOC. REGIONAL DIRECTOR
CHIEF DIV. OF ADMIN.
CHIEF DIV. OF INTERPRETATION
SUPT. DINOSAUR
CHIEF RES. MGT. PLANNING
CHIEF RANGER ACTIVITIES
FIELD SOLICITOR
ACTION TAKEN
Filed in Docket 1

April 2, 1958

Memorandum

To: Regional Director, Region Two

From: Supervisory Engineer, WODC

Subject: Water Rights for Well 3, Quarry Headquarters - Docket 1, Dinosaur

Referring to a copy of a memorandum dated March 26, from the Chief, Water Resources Section transmitting the subject Docket to you, we comply with the second paragraph of this memorandum with the following description of the pump installed.

Make - Fairbanks Morse & Co., Pumona No. 6977, Type H, 10 x 2½ surface discharge head assembly, 22 stages, delivering 50 gpm into the reservoir. It is powered with a 7½ H.P. 220/440 volt, 3 phase electric motor. This unit was sold to the contractor by Fairbanks Morse & Co., for $1,020 FOB Salt Lake City, Utah.

One copy of this has been placed in our copy of Docket 1.

P. E. Smith
Supervisory Engineer

In duplicate

Copy to: Chief, Design and Construction
Chief, Water Resources Section
Supt., Dinosaur NM

C. C. MAILED TO:
Filed in Docket 1
BY [illegible] DATE 4-9-58

L54-L

March 26, 1958

Memorandum

To: Regional Director, Region Two

From: Chief, Water Resources Section

Subject: Water Rights for Well 3, Quarry Headquarters - Docket 1, Dinosaur

Attached is a divider for "Part III - Well 3", which should be placed in the subject docket. Also attached are copy of the completion report under Contract 14-10-232-164, and the cover memorandum of October 4, 1957, which should be placed in the aforesaid Part III.

The completion report and the contract do not cover the pump and power unit which are essential parts of the system. It will be appreciated if a statement is prepared, and distributed for the four dockets, giving the description and price of these features of the project.

As of this date we do not appear to have had any acknowledgment or comment on the application which was submitted to the State Engineer with our letter of July 9, 1957. Such comments should come to this office, but before we make inquiry we shall appreciate confirmation that no communications have gone directly to the Superintendent.

We are sending WODC a docket folder and the subject attachments. I am not sure that records of claims to Wells 1 and 2 are needed until we see what the State Engineer does about the new application.

A. van V. Dunn
Chief, Water Resources Section

Attachments 2

Copy to: Superintendent, Dinosaur, w/c 2 attachments
Chief, WODC, with docket folder and attachment

WESTERN OFFICE
DESIGN & CONSTRUCTION
MAR 28 1958
CHIEF
ADMIN. ASSIST.
PERSONNEL
PLANS & PROG.
SAFETY
ARCHITECT
ENGINEER
LAND. ARCH.
ACTION TAKEN—DATE

L 54

DINOSAUR NATIONAL MONUMENT
Box 621 Vernal, Utah

June 5, 1957

Memorandum

To: Regional Director, Region Two

From: Superintendent, Dinosaur National Monument

Subject: Water Rights, Quarry Headquarters, Dinosaur

WESTERN OFFICE
DESIGN & CONSTRUCTION
JUN 10 1957 A.M.

	CHIEF
	ADMIN.ASSIST.
	PERSONNEL
	PLANS & PROG.
	SAFETY
	ARCHITECT
2	ENGINEER
	LAND. ARCH.
1	
	ACTION TAKEN—DATE

Reference is made to Mr. A. van V. Dunn's memorandum to you of May 16 on the subject.

We have no comment to make on the amount of water to be filed upon.

The subject of return flow discussed in the 4th paragraph of the memorandum is answered in this manner: Prior to making a final selection of the well site, the matter was discussed on the ground with Gene B..Welsh, P.H.S. representative from Denver, Colorado. Since the septic tank is located 1200 ft. from the well and 1400 ft. ± from the river Mr. Welsh did not consider that there was a possibility of contamination. As Mr. Dunn states if the effluent from the septic tank and disposal field should come to the surface in a quantity sufficiently large enough to flow down the 1200 ± ft. of semi-desert draw or wash it would admittedly enter the river approximately 500 ft. up stream from the well site. The well is located on the top of the allevial fan between the draw in which the present (old) headquarters is located and the draw draining the area directly east of the Quarry (Site of Visitor Center). The septic tank and disposal field are located in such a manner, just above the bottom of the east draw, so that any drainage that might occur would be into this draw.

We hope this will assist you in answering Mr. Dunn.

Jess H. Lombard
Superintendent

cc: WODC
Gene B. Welsh

L54

MAY 27 1957

Memorandum

To: The Director

From: Regional Chief of Operations, Region Two

Subject: Water Rights, Quarry Headquarters, Dinosaur National Monument

We have reviewed Mr. Dunn's subject memorandum of May 16, 1957, and have no objection to the revisions to page two of Mr. Robertson's memorandum of February 28.

Computations in connection with irrigation were made on the basis of a 24-hour day. Reduction of this period to an 8-hour day would increase the withdrawal to approximately 18,650 gallons per day as indicated by Mr. Dunn.

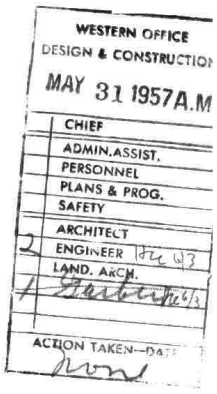
Average peak visitation listed as 1,700 should be increased to 3,000 per day to correspond to figures contained in the present MISSION 66 prospectus.

No additional information is available here concerning return flow. Such iuformation as may be received from WODC and Dinosaur National Monument will be forwarded upon receipt.

(Sgd) George F. Baggley

George F. Baggley
Regional Chief of Operations

Copy to: Supt., Dinosaur NM
Chief, WODC



L54-L

DIVISION OFFICE
PLANS & CONSTRUCTION
MAY 20 '957A M
CHIEF
ASST.
PERSONNEL
PLANS & PROG.
ADMIN.
RPM's
ENGR.

May 16, 1957

Memorandum

To: Regional Director, Region Two

From: Chief, Water Resources Section

Subject: Water Rights, Quarry Headquarters, Dinosaur

Attached are a photostat copy of proposed application for the appropriation of underground flow of Green River, and an interim print of May 8, of Drawing NM-DIN-6972, in duplicate. The drawing will not be filed with the application, but it will be filed in the docket with the application, when approved, until we are ready to make proof.

With reference to the quantity of water to claim, Mr. Robertson's memorandum of February 28 is not incompatible in principle with the basis for claiming 0.111 sec.ft. or 71,740 gallons per day. The quantity of water in second feet is the rate of diversion, but does not imply that the pump will be operated 24 hours per day. If operated for 8 hours, the actual use would be 23,913 gallons per day. If we wished to pin ourselves down to actual beneficial use we should use the acre-feet per day, month or year. Such a limit of use should be left for the final proof.

The tabulation on page 2 also seems to need some revision. It refers to 1,700 visitors per day, but the MISSION 66 prospectus now seems to anticipate 90,000 visitors in August, or an average 3,000 per day. The amount of regulatory storage will determine whether appropriations will have to exceed the monthly average for the week of peak travel. Attention is also called to the fact that about 18,500 gallons instead of 6,200 gallons will be needed for irrigation of 2 acres. Both of these factors suggest that the 50 gpm pump will probably be operating at close to 16 hours per day by the time proof is due.

We have not completed the answers to question 19, concerning return flow, because we should like confirmation of the conditions shown on the drawing. From our very meager topography, the septic tank effluent and irrigation water all appear to drain back to the River within the 800 feet just upstream from the well. If there is to be return flow there is a debatable sanitary factor. Presumably 50% of the water will pass to the septic tank and percolate toward the River.

We shall complete and file the application as soon as you, the Superintendent and WODC reply to this memorandum, preferably through your Office for consolidation of ideas.

SIGNED

A. van V. Dunn
Chief, Water Resources Section

Attachments 3

Copy to: Superintendent, Dinosaur, w/c attachments
Chief, WODC, w/c attachments

11-21-1956: memorandum to regional director regarding water system and water rights (application 13209, docket 1) quarry head

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON 25, D. C.

IN REPLY REFER TO:
L54-L Dino

REG. DIRECTOR
ASST. REG. DIRECTOR
CHF. DIV. OF ADMIN.
CHF. DIV. OF OPERATIONS
CHF. DIV. OF INTERP.
CHF. REC. RES. PLANNING
FIELD SOLICITOR
ACTION TAKEN 11/29/56
FILE

November 21, 1956

Memorandum

To: Regional Director, Region Two

From: Chief, Water Resources Section

D5039 L54

Subject: Water System and Water Rights (Application 13209, Docket 1)
Quarry Headquarters Area, Dinosaur

Attached are two interim prints of November 20 which include data from Drawings 3110 and 3118 of which copies have recently been sent to this office. We are also sending two copies to the Superintendent and one copy to WODC with copies of this memorandum. One copy is for possible use in reply, it being assumed that WODC could supply an overlay if a map is needed.

We had to project the coordinate grid from monuments 12, 13 and 14 on Drawing 5307-A which is in the docket, then project the new well #3 from the coordinates on Drawing 3118, and then locate the SW Cor. Sec. 26 and the real location by ties given on Drawings 3110 and 3118. The data all seem to fit with sufficient accuracy.

We should like to have confirmation that:

1. The entire 3941 feet of pump line are on the same bearing.

2. That ground surface at the well is as scaled and shown from a topographic map.

3. That the water surface elevation in the well is 4924.3 as shown on Drawing 3118 (and whether river water level was nominally the same).

4. That well was drilled to depth of just 30 feet.

We should also like to know:

1. Whether the Park Service has copy of well driller's report. This should be sent to this office at once, if available. If it is necessary to obtain copy from State Engineer, it better be ordered from here for reasons hereafter given.

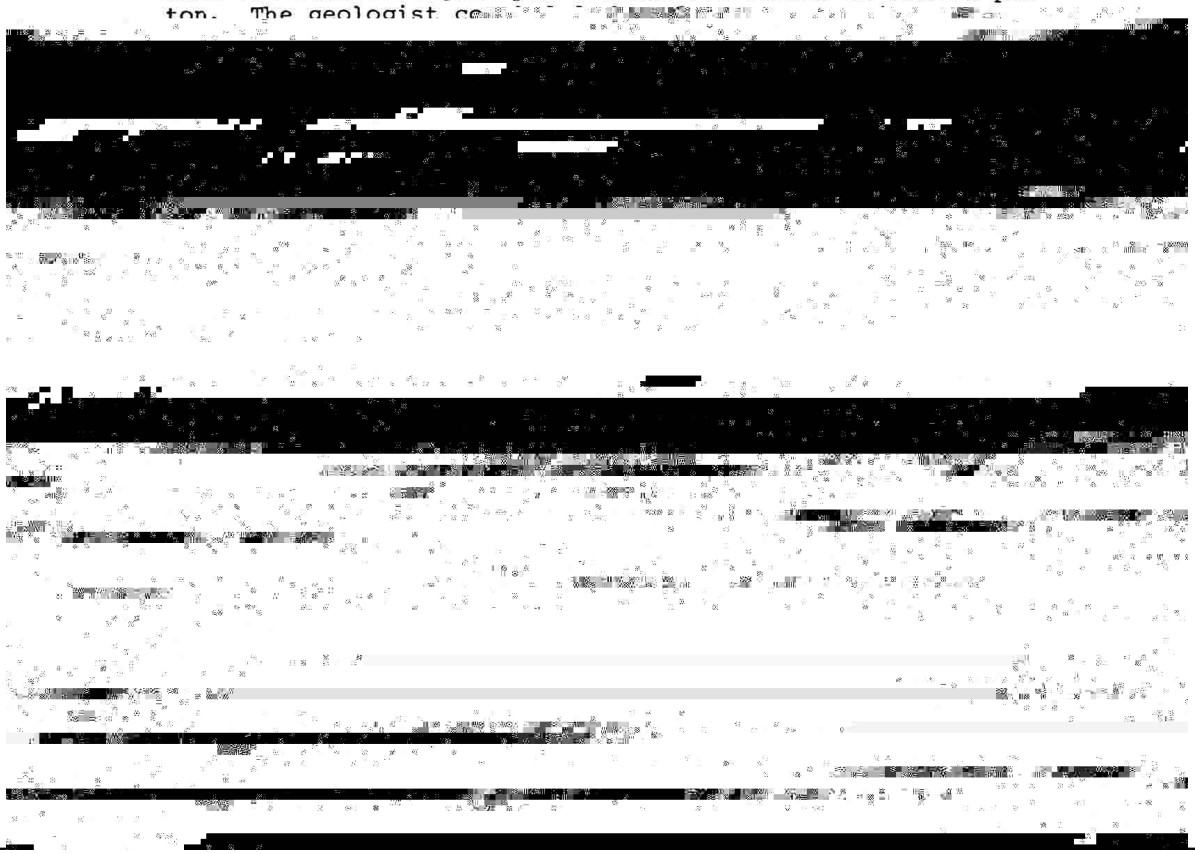
2. What developments are to be retained at Museum and parking area, and what are planned at residential-utility area?

REC'D IN GEN. FILES DEC 11 1956

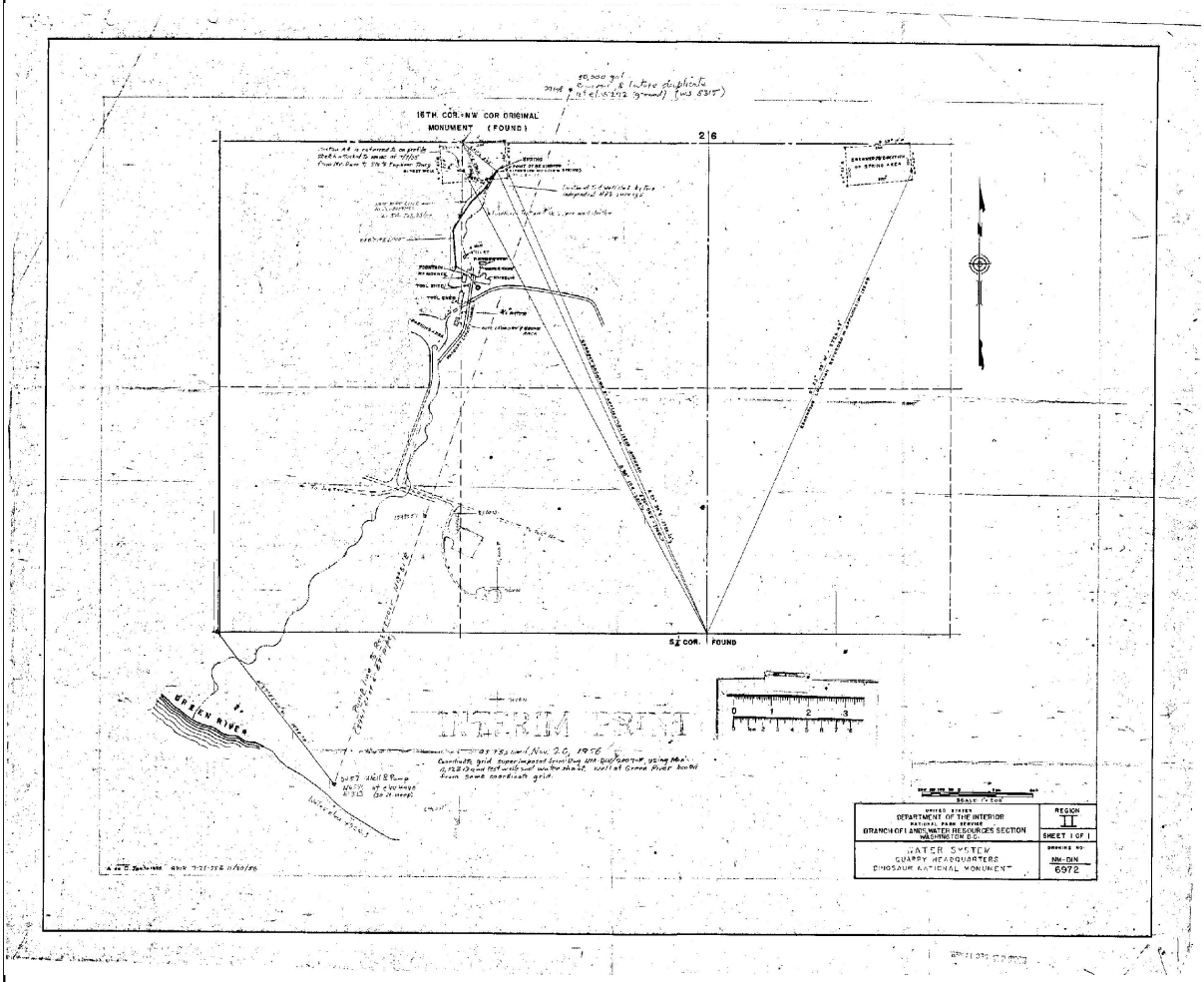
The Office of Minerals Exploration, Geological Survey, United States Department of the Interior, provided a financial assistance loan in connection with exploration work on the Del Norte group (Exh. G-1). The Governmental funds obtained were used to drill some 54 test drill holes and for assaying samples. Results of fire assays of samples taken from 54 drill holes indicated an average grade of .02 ounces of gold per ton and .03 ounces of silver per ton of ore.

The Department of the Interior geologist, who had responsibility for the project and who prepared the final field report, noted discrepancies between drill hole results and assays from bulk samples. He believed it was probably attributable to faulty sampling and preparation of them for fire assaying (in regard to the drill hole samples).

On the basis of the drill holes themselves two "ore shoots" were indicated--one in the central area of the Del Norte vein containing 329,000 tons of ore, with an average value of more than .1 ounces of gold per ton and .18 ounces of silver per ton. The other ore shoot was in the west end of the Del Norte vein with approximately 225,000 tons of ore with .20 ounces of gold per ton and .39 ounces of silver per ton. The geologist co[illegible]



11-20-1956: water system - quarry headquarters



RECEIVED
REGIONAL OFFICE
OCT 5 AM 9 [illegible]
[illegible] ALASKA

In reply refer to:
L54-L

Dino

REG. DIRECTOR
ASST. REG. DIRECTOR
CHF. DIV. OF ADMIN.
CHF. DIV. OF OPERATION
CHF. DIV. OF INTERP.
CHF. DIV. OF COOP. ACT.
FIELD SOLICITOR
Robertson cor
ACTION TAKEN
FILE 10/6

October 3, 1955

Memorandum

To: Superintendent, Dinosaur

From: Chief, Water Resources Section

Subject: Extension of Time to Complete Quarry Headquarters Water System Under Application 13209, Docket 1, Dinosaur

attachment filed in request of M.N. Robertson 10/5

The attached original form letter of September 20 from the State Engineer, granting until January 1, 1960, in which to make proof under Application 13209, should be filed at the top of the contents of Part II of Docket 1.

Copies of this memorandum and the State Engineer's letter are being sent to the Regional Director and Western Office of Design and Construction for similar disposition.

SIGNED

A. van V. Dunn
Chief, Water Resources Section

Attachment as Docket #1

Copy to: Regional Director, Region Two, with copy of attachment
Western Office of Design and Construction, with copy of attachment

REC'D IN GEN. FILES OCT 5 1955

L 54

SEP 23 AM 8:54

THE STATE OF UTAH

OFFICE OF STATE ENGINEER

SALT LAKE CITY

September 20, 1955

Price

United States of America
Department of the Interior
National Parks Service
Washington 25 D. C.

ATTENTION: A. van V. Dunn, Chief, Water Branch

Gentlemen: RE: APPLICATION 12209

Request for Extension of Time in which to submit Proof of Appropriation or Proof of Change contemplated by the above application has been considered and the time for receiving proof is hereby extended from January 6, 1955 to January 1, 1960, inclusive.

Yours truly,
Joseph M. Tracy

Joseph M. Tracy
STATE ENGINEER
403 STATE CAPITOL
SALT LAKE CITY 1
UTAH

ADDRESS ALL COMMUNICATIONS TO:

le

EXTENSION GRANTED

P. S. Although this extension is granted in accordance with the provisions of the law, I earnestly recommend that you proceed to prepare and submit proof at the earliest possible date. One cannot foresee what contingencies might arise in the future; the present possession of your certificate might stand you in good stead.

NOTICE TO WATER USERS

Notice is hereby given that the United States Department of the Interior by A. Van V. Dunn, Chief, Water Resources Section, National Park Service, Washington, D. C., has filed with the State Engineer, a request for an extension of time from January 6, 1955 to January 1, 1960, in which to make and submit Proof of Appropriation of Water under Application No. 13209 for the appropriation of 0.02 sec.-ft. of water from a spring area in Uintah County to be used for domestic purposes at the Dinosaur National Monument.

It is represented that approximately $7,533.00 has been expended on construction of works. It is estimated it will cost approximately $15,000.00 to complete construction and apply the water to beneficial use.

All protests resisting the granting of said request, with reasons therefor, must be in affidavit form with extra copy and filed with the State Engineer, 403 State Capitol, Salt Lake City, Utah, on or before September 10, 1955.

A hearing will be held on this request for extension of time before the State Engineer at 403 State Capitol, Salt Lake City, Utah, at the hour of 2:00 p. m. September 15, 1955. Protestants may appear at the hearing and adduce testimony in support of their protests.

JOSEPH M. TRACY
STATE ENGINEER

"Published in the Vernal Express, Vernal, Ut. from July 28 to Aug. 11, 1955."

07-20-1955: memorandum to regional director regarding water rights, quarry headquarters

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON 25, D. C.

IN REPLY REFER TO:
L54-L .
Dino

July 20, 1955

Memorandum

To: Regional Director, Region Three 2

From: Chief, Water Resources Section

Subject: Water Rights, Quarry Headquarters, Docket 1, Dinosaur

Attached is your copy of letter of July 15 from the State Engineer and our reply. Copies are being sent directly to the Superintendent and Western Office of Design and Construction. We will supply all three offices with the new regulations, and we hope with the revised 1953 water laws.

We may now transfer the priority of Application 13209 to the second well, to the extent of authorized diversion. We can also file new application for excess yield of new well because of greater artesian pressure. The question is whether Well No. 2 will be put to use before it caves in, if we file the two applications in the near future. There is also some question as to whether the surplus yield of Well No. 2 will be used, which depends on the nature of ultimate developments at the Quarry Headquarters.

filed in Docket 1

A. van V. Dunn
Chief, Water Resources Section

Attachments 2

Copy to: Superintendent, Dinosaur, with attachments
Western Office of Design and Construction, with attachments

C. C. MAILED TO:
.....
.....
W..... Date.....

REG. DIRECTOR
ASST. REG. DIRECTOR
CHF. DIV. OF ADMIN.
~~CHF. DIV. OF OPERATIONS~~
CHF. DIV. OF INTERP.
CHF. DIV. OF COOP. ACT.
FIELD SOLICITOR
ACTION TAKEN
9/1/55

REC'D IN GEN. FILES SEP 1

WR Copy

154-L

July 7, 1955

Mr. Joseph M. Tracy
State Engineer
Salt Lake City, Utah

Re: Application 13209
Dinosaur National Monument

Dear Mr. Tracy:

We concur in the proposal in your letter of June 30 to advertise the application for extension of time in excess of 14 years under Application 13209 on July 15. This application relates to the spring area with diversion at the main spring, and shallow Well No. 1 which intercepts the same water source within that spring area.

The receipt of the drillers report of June 4, 1952, with your letter of December 28, 1954, introduced a new location for the well, by tie to the NW Cor. NE¼ SW¼ Sec. 26, which was also the NW Cor. of the original area of Dinosaur National Monument, instead of to the S¼ Corner of that Section which this Service had been using. An inconsistency was noted in the relation between the two corners, or in the location of Well No. 2 after the application for extension of time to complete developments under Application 13209 was sent to you on January 4.

We have just received a report on the second of two check surveys by different engineers who independently agree that Well No. 2 is S25°34' E. 237.6 feet from the said NW Cor. of NE¼ SW¼ of Sec. 26. This places the two wells in a plane nominally normal to the course of the spring outlet and about 100 feet downstream from the spring.

Attached is a vertical section through the two wells, showing their logs and a geologists report on the dip rock strata at Well No. 1. The indications are that both wells and the spring derive their water from the same sandstone aquifer which is confined except as it approaches the surface at the spring. The tunnel from Well No. 1 intercepted the water near its normal surface. Well No. 2 intercepted it at a depth of 162 feet, and the spring is approximately at the elevation of the water surface.

It is important, therefore, to advertise the request for extension of time under Application 13209, as you propose, to retain the date of priority. However, before we file a supplemental application for change in point of diversion to Well No. 2, or for a new appropriation therefrom, we should like to know whether the water laws grant you authority for the changes or clarification which the additional information suggest.

First, the two wells and the spring appear to derive their water from the same artesian aquifer in white sandstone. Diversions to the extent of the authorized 0.02 sec.ft. under Application 13209, with priority of January 2, 1940, and changing the point of diversion to Well No. 2 should be permitted. It should also be possible to reclassify the source as groundwater, without penalty, now that the two well logs indicate that both wells and the spring derive their water from that aquifer and not from the percolating water in the top soild and shale which was excluded from Well No. 2 by 40 or 41 feet of casing.

Second, a new application should be filed for the appropriation of well yield in excess of 0.02 sec.ft. which is available from Well No. 2 because of the additional approximate 190 feet of head where that well intercepts the aquifer.

Sincerely yours,

SIGNED

A. van V. Dunn
Chief, Water Resources Section

Enclosure

Copy to: Regional Director, Region Two (2) with copy of State Engineer's letter of 6/30
Superintendent, Dinosaur
Western Office of Design and Construction
Mr. P. Miller
Mr. Dunn

AvVDunn:lct

THE STATE OF UTAH
OFFICE OF STATE ENGINEER
SALT LAKE CITY

JOSEPH M. TRACY
STATE ENGINEER

June 30, 1955

United States Department of the Interior
National Park Service, Lands Branch
c/o Mr. A. van V. Dunn
Room 2225 Interior Building
Washington 25, D. C.

Gentlemen:

RE: APPLICATION NO. 13209
Your No. L54-L
Quarry Ridge WS. Dinosaur

On review of the file, relative to the above numbered application, it is noted that proof was due January 6, 1955 and that the request for extension of time was filed January 6, 1955.

No action has been taken on the required advertising relative to this request for extension of time after 14 years, since the receipt thereof, as a request was made in your letter of January 4, 1955 to withhold this advertising, as you may file an additional application to appropriate or a change application relative to this application, and as there may be a reduction in cost by a simultaneous advertising thereof.

As it is the administrative policy of this office to advertise applications to appropriate and change applications in group notices and the advertising required in granting extensions of time to complete work after 14 years relative to an application is published singularly, there is no reason to withhold the advertising relative to granting an extension of time on Application No. 13209, as no reduction in cost could be effected.

This is to advise you that the preparation of the Notice to Water Users to be published relative to Application No. 13209 will proceed on July 15, 1955.

Yours truly,

Joseph M. Tracy

Joseph M. Tracy
STATE ENGINEER

JMG/vm

C O P Y

L 54-L

DINOSAUR NATIONAL MONUMENT
BOX 621, VERNAL, UTAH

June 1, 1955

Memorandum

To: Chief, Water Resources Section

From: Superintendent, Dinosaur National Monument

Subject: Water Right Application 13209, Docket 1, Quarry Headquarters Water System, Dinosaur National Monument

Mr. Grunigen, of the Western Office, Design and Construction, was asked to check the location of the test well #2 which he has done. He has tied the well to the Original NW corner of the Monument the same as Mr. Herranen did and makes the location the same.

The well bears S 25° 34' E, 237.6 ft. from the Northwest corner of the Original Monument which is the NW corner of the NE¼ of the SW¼ of Section 26.

In my memorandum of Feb. 25, 1955, L 54, to the Regional Director, Region Two the description of the original corner was incorrectly given.

It is hoped this information will clear the matter.

Jess H. Lombard
Superintendent

cc: WODC w/attachments
Reg. Dir., Reg. Two

RECD JUN 14 1955

In reply refer to:
L54-L

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON 25, D. C.

April 6, 1955

Memorandum

To: Regional Director, Region Three

From: Chief, Water Resources Section

Subject: Water Right Application 13209, Docket 1, Quarry Headquarters Water System, Dinosaur

Attached three prints of Drawing NM-DIN-6972 show the location of Test Well No. 2, as drilled, from ties to the S¼ Cor. Sec. 26, which were supplied several years ago, and as projected on Drawings 2028 and 6972, which were submitted in reply to my memorandum of January 19. The disconcerting point is that the new tie does not agree with previous bearing and distance from the S¼ Cor. of the Section, or with the tie given by the well driller in his report of June 4, 1952 to the State Engineer, which is included in Docket 1.

Since we have not shown the BLM survey of the section, there has not been any past reason to question independent ties to the S¼ and nearest 1/16 corner, but there is, or has been, some radical error in ties if the spring, well, and a land survey marker have the relations shown on the attached drawing, and the survey marker is as close to a theoretical 1/16 corner as shown.

C. O. MAILED TO: 4/19/55

Since we are holding up an important reply to the State Engineer, please check the conflicting location ties which are now available, using one of the attached prints for reply.

By memorandum of March 22, Mr. Lombard has suggested potential difficulty in measuring spring flow. Any proof requires an actual measurement by a competent engineer. Therefore, some means will have to be worked out when an engineer visits the area the next time, and the method and results should be sent to us for proper action.

A. van V. Dunn
Chief, Water Resources Section

REG. DIRECTOR
ASST. REG. DIRECTOR
CHF. DIV. OF ADMIN.
CHF. DIV. OF OPERATIONS
CHF. DIV. OF INTERP.
CHF. DIV. OF COOP. ACT.
FIELD SOLICITOR
ACTION
FILE 4/19/55

In duplicate

Attachments 3

Copy to: Western Office of Design and Construction, with attachment

Drawing 6972 is filed in Docket #1 for Dinosaur. AD 4/21/55

RECD IN GEN FILES APR 21 1955

REG. DIRECTOR
ASST. REG. DIRECTOR
CHF. DIV. OF ADMIN.
CHF. DIV. OF OPERATIONS
CHF. DIV. OF INTERP.
CHF. DIV. OF COOP. ACT.
REGIONAL SOLICITOR
1954
ACTION TAKEN
LETTER 3/28/55

DINOSAUR NATIONAL MONUMENT
BOX 621, VERNAL, UTAH

March 22, 1955

Memorandum

To: The Director

From: Superintendent, Dinosaur National Monument

Subject: Water Rights, Application 13209, Docket 1, Dinosaur

Following is the information in regard to, "population", requested in Assistant Director Allen's memorandum of Feb. 3 and by the memorandum of Mar. 4 from the Region Two Office.

Casual Visitors	600 daily average during August, 1954
Employees & Families	20
Campers & Picnickers	20
Total using water	640 daily average during August, 1954

There was one small evaporation cooler in operation in the office. There was no irrigation and shop use of water amounted to an estimated 300 gals. daily.

No details concerning establishment of rate of flow of the spring have been found here. I agree with Regional Engineer Robertson that the flow has long been considered as about 4 gals. per minute. I found a memorandum by former Custodian Dan Beard referring to Dr. Boyle's figure of 3½ gals. per minute but did not find Boyle's report.

It would be practically impossible to obtain an accurate flow measurement now as the curtain wall of the catchment basin does not intercept all of the flow. I consequently, distrust the accuracy of earlier flow figures. I firmly believe that if all the flow of the spring could be intercepted, it would exceed 5 gals. per minute, year-round.

Jess H. Lombard
Superintendent

In duplicate
cc: Reg. Two
WODC

REC'D IN GEN. FILES MAR 29 1955

Robertson 3/4/55
LSh
Dino Baggley 3/4

MAR 4 1955

Memorandum

To: Superintendent, Dinosaur National Monument

From: Regional Chief of Operations

Subject: Water Rights, Application 13209, Docket 1, Dinosaur

You have a copy of Mr. Dunn's memorandum of February 3 requesting additional information on the above subject. Please furnish the information in regard to "population" as requested in the second paragraph of Mr. Dunn's memorandum.

We have searched our files and find very few references to measurements of the spring flow. It is possible that you have memoranda in your own files that show such measurements but that were never sent to this office. Our files show that Mr. Boyle reported a flow of 3½ gallon per minute in May 1939; in August 1942 a flow of 3½ to 4 gallon per minute was shown; and in March 1945 a flow of 4 gallon per minute was indicated and Mr. Unterman has indicated that this is a steady flow. Regional Engineer Robertson is under the impression that the flow has always been considered as approximately 4 gallon per minute, that it has been quite constant, winter and summer, and that fluctuation in precipitation has had no effect on its flow.

We believe no further efforts should be made to have the shaft, excavated by Mr. Boyle, considered as a part of the water supply system for Dinosaur National Monument.

We are sorry that we have not commented on Mr. Dunn's memorandum at an earlier date

(Sgd) George F. Baggley

George F. Baggley
Regional Chief of Operations

Copy to: Director

WERobertson:er

REC'D IN GEN. FILES MAR 8 1955

In reply refer to:
L54-L

AIR MAIL

FEB - 4 1955

Mr. Joseph M. Tracy
State Engineer
Salt Lake City, Utah

Re: Application 13209 for Appropriation of Water, Dinosaur National Monument

Dear Mr. Tracy:

With your letter of January 26, you returned Application 13209-Amended, and requested that it be resubmitted as an 'Application for Permanent Change in Point of Diversion'. You also pointed out the irregularity of developing a spring area by means of a well, and suggested that the reference to a spring area be omitted in the application. In your letter of December 28, 1954, as item 2, you stated that the second well could be considered as additional development of the spring area, but only to the extent of 0.02 sec.ft. authorized under Application 13209. As item 7, you stated that the loss of priority for a new appropriation for the additional well yield in 1955, as compared with the priority of January 1940, when Application 13209 was filed, would probably not be serious.

Before completing and returning the 'Application for Permanent Change in Point of Diversion', we believe that the basic conditions should be clarified. We have prepared the enclosed table from the logs of Wells 1 and 2 by engineers of the National Park Service and the log of Well 2 by the driller. Although there are some variations and omissions, the records suggest that all water originates in an artesian aquifer with a surface elevation at about 5196, about 3 feet above the surface spring, and about 3' to 13' above the first water encountered in Wells 1 and 2. The water in the upper aquifer does not appear on the adjacent hillside, either because of rapid seepage into the strata below or because of confinement by the surface mantle. The well driller believes that he excluded the upper level water by casing in Well 2. Mr. Dunn did not catch some of these features until he compiled the table.

Assuming that the State laws will still permit you to recognize the appropriation of water from Well 2 under Application 13209, we believe that the basic source of the spring and well is in the nature of an artesian channel or basin and should be reclassified by the suggested change in Permanent Points of Diversion, or some other form of amendment. If, on the other hand, you must differentiate between the water under artesian pressure and that portion emerging at the spring, rights under Application 13209 should be the spring diversion, and a new application is essential for the appropriation of the well water. Your comments are requested.

RECD

intercepted the principal source, but pump tests, if any have been made or can be made, at once will have considerable affect on the selection of the ultimate source. We should like to have your ideas at once.

We suggest that as soon as Messrs. Barton, Kell, and Lassiter review this memorandum and the one from Mr. Lohman they phone Mr. Dunn, Republic 7-1820, Extension 3306, and advise what well logs and pump tests are available, and what work can be done this summer to complete the water system design, including selection of point of division and source of supply, and to answer any further questions Mr. Dunn may wish to ask before completing the conditional statement of claim.

Meantime, Mr. Dunn has planned to go through Denver on June 22, on his way to Grand Teton. He now proposes to take such time as may be needed, that day, with Messrs. Lohman and Marmaduke if they are available. Before that time he will submit the best statement of claim which he can now prepare. His visit will be to make such changes as may be desirable as a result of further information received in the interim, and to see what further information Mr. Lohman may be able to supply for your design purposes.

(SGD) THOMAS J. ALLEN

Assistant Director

In duplicate

Attachments 3

Copy to: Department of Justice (2) w/c of Mr. Lohman's
Solicitor " " " "
Geological Survey (2) " " " "
Mr. Dunn " " " "

AVDunn:cc

	Spring	Well No. 1 NPS Log	Well No. 2 NPS Log	Well No. 2 Driller's Log
El.	5153.0	5190.0 (surface elev.)	5160.0 (surface elev.)	5160.0 (surface elev.)
		39.5 Clay & Shale	20.0 surface mantle & quick sand	20.0 surface mantle & quick sand water in quick sand
		5150.5	5140.0	5140.0
		33.5 fine sand stone & water elevation 5150.5 to 5143.0	38.0 soft sand stone	38.0 soft sand stone
			5102.0	5102.0
		5117.0	6.0 hard sand stone	5.0 lime stone
		Well was bailed at rate which stopped spring flow. Spring flow returned to normal after well was back filled.	5096.0	5097.0
			98.0 tight sand stone	99.0 blue sand stone
			4998.0	4998.0
			3.0 white sand stone & water from 5010-4992	2.0 white sand stone
			4995.0	4996.0
			3.0 hard sand stone	2.0 sand stone
			4992.0	4994.0
				2.0 blue shale
				4992.0
				Cased 5160-5136.5
				Water rose to 4 ft. below t (elev. 5156) but lower aquifer not designated by well driller.

RECD IN GEN. FILES MAR 8 1955

02-03-1955: memorandum to regional director regarding water rights, application 13209

In reply refer to:
L54-L

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON 25, D. C.

February 3, 1955

REG. DIRECTOR
ASST. REG. DIRECTOR
CHF. DIV. OF ADMIN.
~~CHF. DIV. OF INTERP.~~
CHF. DIV. OF INTERP.
~~CHF. DIV. OF COOP. ACT.~~
FIELD SOLICITOR
ACTION TAKEN
FILE

Memorandum

To: Regional Director, Region Two

From: Chief, Water Resources Section

Subject: Water Rights, Application 13209, Docket 1, Dinosaur

Attached is your copy of the letter of January 26 by which the State Engineer has returned Application 13209-Amended, and the reply by Mr. Allen. A copy of this memo and the letters are being sent directly to the Superintendent and the Western Office of Design and Construction because of the potential need for some of the information within a week or ten days which only the Superintendent can supply.

If the State Engineer segregates surface and artesian waters, as anticipated, it will probably be possible to perfect the spring rights. To be prepared for such action, we should have records of the maximum daily attendance, broken down as to campers, picnickers and casual visitors, and approximate permanent population on same day, with the date. We should also know whether there are evaporation types of air conditioners in any building, and the number, and the nature and best estimate of water used at shops and for any irrigation.

In order to determine the amount of spring water on which to base final claim or proof, we should have any records available as to maximum flow. We want to know whether there has been a wet year flow in excess of 0.01 sec.ft. In addition, Utah laws require an actual record of measured flow, giving name and title of man making measurement, description of instrument used for measurement, the time it took to fill a container or the other records for instrument used, and the date of the measurement. Since the water seems to come from an artesian source, the flow may be fairly constant and we should be so advised. If there is variation, and measurements have not been made at peak flow, I can attempt to show potential maximum from related flow of Green River on specified date and in wetter seasons.

It is assumed that we will have to revise our claims as soon as we hear from the State Engineer. Hence, we should have best available data at once. In connection with the future plans, it is also recommended that any representative of the Geological Survey who is to make studies of potential water sources for the new headquarters should be requested to give some thought, and report on the probable limitations of the artesian source intercepted by Well 2.

C. C. MAILED TO:
Date.....
By.....

REC'D IN GEN. FILES MAR 8 1955

Nothing in this correspondence is supposed to eliminate the need for completing the water system and related water using facilities in accordance with the recommendations in my memorandum of January 5. Some further progress will have to be reported to the State Engineer within a few years.

A. van V. Dunn
Chief, Water Resources Section

Attachments 2

Copy to: Superintendent, Dinosaur, with attachments
Western Office of Design and Construction, with attachments

REC'D IN GEN. FILES MAR 8 1955

C
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THE STATE OF UTAH
OFFICE OF STATE ENGINEER
Salt Lake City

January 26, 1955

United States Department of the Interior
National Park Service
c/o A. van V. Dunn
Chief, Water Resources Section
Washington 25, D. C.

RE: APPLICATION NO. 13209

Gentlemen:

This is to acknowledge receipt of your letter dated January 4, 1955, Purchase Order No. 99-285, request for extension of time for submitting proof on Application No. 13209, and application to appropriate water for miscellaneous purposes marked "Application No. 13209-Amended". The aforementioned documents were received by this office January 6, 1955.

I am returning, herewith, the aforesaid application marked "13209-amended" as it appears that it was meant to be filed as a change application amending Application No. 13209, and is therefore not in accordance with the rules and regulations of this office which require that changes be filed on form entitled "Application for Permanent Change of Point of Diversion, Place and Nature of Use". I am enclosing, herewith, six of the above entitled forms for your convenience in resubmitting the change application.

Since it is your intention to amend Application No. 13209 rather than file a new application on the 168 ft. deep well and let Application No. 13209 cover the development, as stated therein, as was our recommendations in our letter to you dated December 28, 1954, and since it is irregular to develop a spring area by means of a well and it appears from facts available that the water applied for is not from the spring area but is in fact an underground aquifer with the water diverted therefrom by a well or a developed spring, it is recommended that a statement be made in the Explanatory of the change application to the effect that it is intended under the change application to divert the same water applied for in Application No. 13209 at either one or both of the new points of diversion, which will be the 168 ft. deep well and the developed spring, and that the shaft and collecting tunnels contemplated under the original application No. 13209 are to be abandoned as a spring area development.

No further action will be taken on the request for extension of time to submit proof on Application No. 13209 until receipt and acceptance by this office of the aforementioned change application, at which time it will be advertised simultaneous, if applicable, with the request for extension of time, as requested in your letter of January 4, 1955.

Yours truly,
(SGND)
Joseph M. Tracy
STATE ENGINEER

Enc: Change Application
Forms (6)
App. 13209 - Amended

01-19-1955: memorandum to regional director regarding water system, quarry headquarters, water right application 13209

In reply refer to:
L54-L

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON 25, D. C.

[illegible] JAN 24 AM 8 [illegible]

January 19, 1955

[illegible] PARK SERVICE
[illegible] NEBRASKA

Memorandum

To: Regional Director, Region Two

From: Chief, Water Resources Section

Subject: Water System, Quarry Headquarters, Water Right Application 13209, Docket 1, Dinosaur National Monument

Attached are four advance prints of Drawing NM-DIN-6972 compiled in connection with the application for extension of time in which to perfect rights under Application 13209 at the first of the month. The drawing has not been submitted to the State Engineer, but the tracing is in a form which can be completed for either final proof, or to clarify the requested amendments, if necessary.

Please return one print with the correct pipe connection to the reservoir, which we have shown by dotted line. We should also like to have the existing buildings, road alignment and parking area completed because we have shown them from a number of drawings at different dates and accuracy.

Drawing filed in Docket file # 1, Dinosaur. 4/21/55

A. van V. Dunn
Chief, Water Resources Section

In duplicate
Attachments 4

Copy to: Western Office of Design and Construction, with copy of print

C. C. MAILED TO:
D.I.N.M. [illegible]
joint to drwg. NM-DIN-6972
By WEK:ev Date 1/26/55

REG. DIRECTOR
ASST. REG. DIRECTOR
CHF. DIV. OF ADMIN.
CHF. DIV. OF OPERATIONS
CHF. DIV. OF INTERP.
CHF. DIV. OF COOR. ACT
FIELD SOLICITOR
ACTION TAKEN
FILE

REC'D IN GEN. FILES FEB 1 1955

01-05-1955: memorandum to regional director regarding amendment and extension of time under water right application 13209

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON 25, D. C.

In reply refer to:
L54-L

January 5, 1955

Memorandum

To: Regional Director, Region Two

From: Chief, Water Resources Section

Subject: Amendment and Extension of Time under Water Right Application 13209 (Docket No. 1), Dinosaur National Monument

Attached are three copies of (1) letter of December 28, 1954 from the State Engineer of Utah; (2) well driller's report for Well No. 2; (3) application for extension of time in excess of 14 years; and (4) our letter of transmittal to the State Engineer. We are holding the amended Application 13209 until it is accepted, with possible corrections, by the State Engineer. The well driller's report and application for extension of time should be filed at proper dates in Part II of Docket 1, at your office, Rocky Mountain and Dinosaur. We are sending copies of the State Engineer's letter, our letter transmitting the applications, and this memorandum to the Western Office of Design and Construction, but not attempting to establish a docket in the WODC as a result of your recent suggestions.

Due to the State Engineers delay in replying to my letter of December 9, 1954, there has been no time to obtain your concurrence in our procedure. The adoption of the ground water law subsequent to 1940 makes Application 13209 irregular in claiming both surface and ground water. We do not believe that a supplemental claim to ground water at a later day will be any less valuable than one filed now, but it is essential to retain the 1940 priority of right to the surface flow by further extension of time, until the final water system for the Quarry Area is completed and the water is put to full use through adequate residences, comfort stations, and other possible developments.

In requesting an extension to 1960, I hope to obtain time in which to decide on the plans for an alternative Headquarters Area and related source of water supply, and some further development of the facilities which will still be needed at the Quarry Area. We can actually get further extensions for a total of 50 years from either last fall or January 6, 1955, if there is reasonable diligence in the next 5 years.

For these reasons, I strongly recommend that some construction be attempted with 1957 funds or emergency 1956 funds, either to place the well in operation, or to modernize comfort stations, increase residence facilities, or provide other water using facilities which will be permanently needed at the Quarry Area.

A. van V. Dunn
Chief, Water Resources Section

In triplicate
Attachments 12

REC'D IN GEN. FILES JAN 28 1955

C. C. MAILED TO: Rocky Mountain
By ... Date 1/7/55

C
O
P
Y

THE STATE OF UTAH
Office of State Engineer
Salt Lake City

Joseph M. Tracy
State Engineer

December 28, 1954

United States Department of the Interior
National Parks Service
Washington 25, D. C.

ATTN: A. van V. Dunn, Chief,
Water Resources Section.

RE: Application #13209

Dear Sir:

This is to acknowledge receipt of your letter dated December 9, 1954 received by this office December 13, 1954, wherein information is requested relative to the above numbered application.

It is noted on examination of the Application #13209 that the application was filed January 2, 1940 to appropriate 0.02 second-feet of water for Domestic and Municipal purposes from a spring area as described therein. The water to be diverted from a point N 28°10' W, 2814 feet from the S¼ corner of Section 26, T4S, R23E, S.L.B. & M., by pumping of an exploratory shaft connected by tunnels driven along a water bearing sandstone. The application also states that the pumping of the shaft stopped flow of a natural spring that had been used previous to the filing of the application. The spring is located as described in the application at a point N 24°38' W, 2746 feet from the said S¼ corner, Section 26, T4S, R23E, S.L.B. & M. All of the aforementioned points were meant to be within the spring area that is described in the application.

From examination of the file relative to the above noted application it is found that by letter dated April 7, 1951 permission was granted to drill a well from 75 to 150 feet deep near the aforementioned exploratory shaft and within the intended spring area and that on June 4, 1952 a report of Well Driller was filed with this office wherein it was stated that a well cased with 8" and 6" diameter casing, 168 feet deep had been completed and tested to produce a maximum of 10 gallons per minute.

A photostatic copy of the above mentioned Well Driller's report is enclosed herewith as requested.

It is also noted that the course and distance to the points of beginning of the spring area as described in the application is N 23°39' E, 2729.45 feet from the S¼ corner of said Section 26 and as stated in your letter is in error and should read N23°and 39' W, 2729.45 feet from the aforesaid S¼ corner to be consistant with the intent of the application to divert the water by development in the spring area.

In view of the above noted facts the following information is submitted in answer to your inquiries:

1. The course and distance to the point of beginning of the spring area that is in error could be corrected by filing a Change Application. The filing of a Change Application as stated in Section 73-3-3, Utah Code Annotated, 1953, does not affect the priority of the original application. It would appear however that no action is necessary until the submitting of Proof of Appropriation at which time other changes may be necessary and this error could be corrected at that time.

2. The second well drilled under authorization from this office by letter dated April 7, 1951 and covered by the Well Driller's Report enclosed herewith, could be considered as additional development of the spring area and no action would be necessary to change the point of diversion by Change Application at this time as it is within the spring area. However Application #13209 was filed to appropriate 0.02 second-feet of water from a spring area and as it is stated that the original development by the shaft nearly approached that amount and was from the same source as the natural spring which would appear that a quantity of water beyond the 0.02 second-feet has been developed. To appropriate any amount of water over 0.02 second-feet would require the filing of a new application to appropriate. It would then appear that a filing to appropriate underground water to cover the well drilled to 168 feet would be the logical step to take which would eliminate the filing of a Change Application to change the point of diversion. This new application would have a priority of the date of filing and the original application would cover the natural spring developed flow and the shaft developed flow with the priority of it's date of filing of January 2, 1940.

Also please be advised that changes amending the point of diversion, place and nature of use can only be made by filing a Change Application and not in request for Extension of Time.

3. In accordance with Section 73-3-12, Utah Code Annotated, 1953, extension of time within which to submit proof beyond 14 years cannot be made without advertising regardless of type of form. The cost of advertising must be paid by the applicant. In the case of Federal Agencies the cost of advertising need not accompany their request for Extension of Time as when the cost of advertising is submitted to this office from the publisher a notice thereof will be forwarded to the United States of America as applicant, indicating the correct amount due.

4. If it is your desire to appropriate no more than 0.02 second-feet of water from within the spring area and from any or all of the three sources and make proof in accordance thereto it would appear that a Change Application would be required at the time of submitting proof, amending the application in respect to the point of diversion. The filing of the Change Application if one is found to be necessary will not change the priority of the original application.

5. It is possible to submit proof under Application #13209 to obtain a certificated right to a maximum of 0.02 second-feet from the development of the spring area providing that quantity of water has been developed and used. Any additional quantity developed would entail the filing of a new application.

6. The certificate issued under Application #13209 could provide for a maximum of 0.02 second-feet from any or all sources of development within a spring area providing the proof outlines specifically the conditions of the development and substantiating the beneficial use of that quantity of water by actual measurement.

7. Since the spring area is relatively isolated and a small quantity of water is involved a loss in priority would probably not be serious.

8. As stated in Paragraph 2, a water application filed for any amount over 0.02 second-feet would be a new appropriation and therefore would have a priority to the date of filing and providing it went unprotested on advertising would be an application in good standing.

Hoping the above information will clarify your questions and if further information is needed it is recommended that a representative familiar with the problem contact this office for further discussion.

Enclosed herewith is the requested Well Driller's Report and six (6) applications to appropriate water for Miscellaneous purposes for your use on which to file for additional water if you find it necessary.

Also this is to advise you that a request for Extension of Time for which to submit proof on the aforementioned application must be received by this office or post-marked on or before January 6, 1955 or the application will lapse.

Please be advised that in compliance with your letter dated December 8, 1954, pertaining to proofs of change submitted under applications numbered a-1657, a-1658, a-1659 and a-1660, examination thereon is in process. You will be advised upon completion of the examination as to the requirements necessary for the completion of these proofs.

Very truly yours,

/s/ Joseph M. Tracy
JOSEPH M. TRACY
State Engineer.

Encl: Well Driller's Report

(6) Miscellaneous Applications.

In reply refer to:
L54-L

AIR MAIL

January 4, 1955

Mr. Joseph M. Tracy
State Engineer
Salt Lake City, Utah

Application 13209 Amended--Dinosaur Natl. Monument

Dear Sir:

Enclosed are our application for extension of time in excess of 14 years in which to complete construction and make full beneficial use of water under Application 13209 for the Quarry Headquarters at Dinosaur National Monument, amended Application 13209 to correct description of spring area and designate a new well location, and a purchase order, but no voucher, to cover cost of publication of notice.

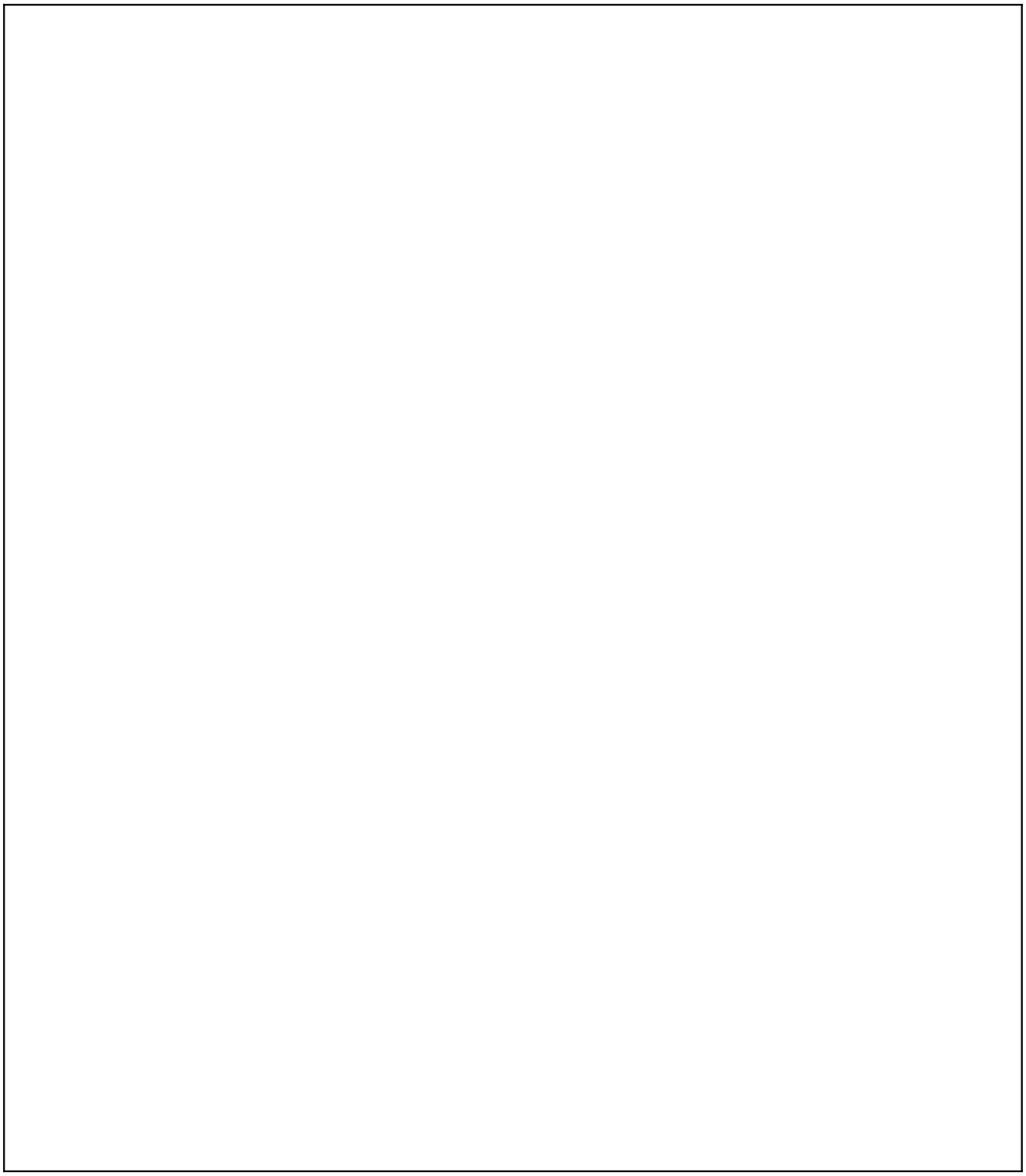
In accordance with your letter of December 28, 1954, it is necessary to publish notice of the application for extension of time at the applicants expense, but the payment need not be made until receipt of your notice to the United States of America, as applicant, of the cost of advertising. The Application 13209 Amended will also require publication of notice, and you may be able to combine the published notices.

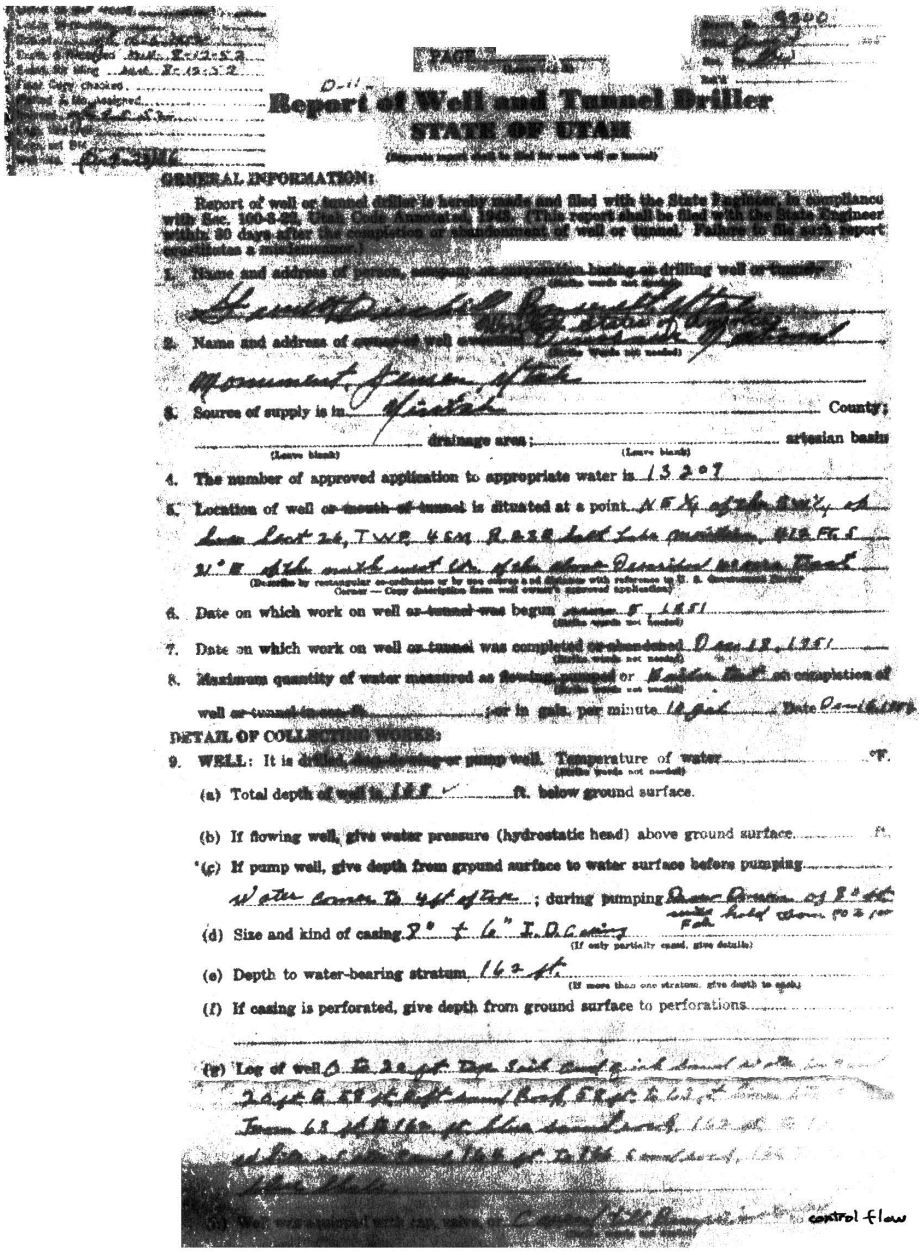
The purchase order, with estimated cost of $20.00, is to obligate Federal funds, and to indicate to which agency and office of the United States of America your notice or invoice should be sent. That notice should be submitted with at least one, and preferably two copies of the published notice, and we assume it will be certified to eliminate the need for a voucher.

We assume that you will hold our purchase order no. 99-258 of December 7, 1954, and the accompanying voucher for a similar publication of the request for extension of time under Application 13618 for the appropriation of water at Arches National Monument, until the notice is published. The unused voucher can then be returned with a certified invoice.

Although your letter of December 28, 1954 indicates that amendments of Application 13209 might wait until time for proof, we have found the change in well location to be an essential part of the justification for further extension of time and evidence of progress in the development. It will also be advisable to correct errors while the Federal personnel includes those familiar with the work, and it will simplify statements relating to the extension of time to have the corrections. There may be a reduction in the total cost of

01-04-1955: letter to joseph m. tracy regarding application 13209 amended cont.





Report of Well and Tunnel Driller
STATE OF UTAH

GENERAL INFORMATION:

Report of well or tunnel driller is hereby made and filed with the State Engineer in compliance with Sec. 100-6-23, U.C.A. 1943. This report shall be filed with the State Engineer within 30 days after the completion or abandonment of well or tunnel. Failure to file such report constitutes a misdemeanor.

1. Name and address of person, company or corporation having or drilling well or tunnel:

2. Name and address of owner of well or tunnel:

Monument Junction, Utah

3. Source of supply is in Uintah County;

(Leave blank) drainage area; (Leave blank) artesian basin

4. The number of approved application to appropriate water is 13207

5. Location of well or mouth of tunnel is situated at a point N E ¼ of the SW ¼ of Lot Lot 24, TWP 4 S R 23 E Salt Lake meridian, 810 Ft. S 21° E of the north west Cor. of the above described 40 acre Tract

(Indicate by rectangular co-ordinates or by use of courses and distances with reference to U. S. Government survey)
Corner — Copy description from well owner's approved application)

6. Date on which work on well or tunnel was begun January 5, 1951

7. Date on which work on well or tunnel was completed or abandoned January 12, 1951

8. Maximum quantity of water measured as flowing pressure or Natural Flow on completion of well or tunnel (mouth) is ..... gal. per minute 10 gal Date Jan 16 1951

DETAIL OF COLLECTING WORKS:

9. WELL: It is drilled, dug, bored or pump well. Temperature of water ..... °F.

(a) Total depth of well is 165 ✓ ft. below ground surface.

(b) If flowing well, give water pressure (hydrostatic head) above ground surface ..... ft.

(c) If pump well, give depth from ground surface to water surface before pumping .....

Water Comes To 4 ft of Top ; during pumping Water Operation of 8 ft. water held down to 20 ft

(d) Size and kind of casing 2" & 6" I.D Casing

(If only partially cased, give details)

(e) Depth to water-bearing stratum 162 ft.

(If more than one stratum, give depth to each)

(f) If casing is perforated, give depth from ground surface to perforations .....

(g) Log of well 0 To 24 ft Top Soil and Sand and Gravel with

24 ft To 58 ft Light Sand Rock 58 ft To 63 ft

From 63 To 162 ft Blue Sand Rock 162 ft

ft To ft

(h) Was well equipped with cap, valves, etc., to control flow? control flow

E. TUNNEL: If a tunnel [illegible]

(a) Dimensions ____; total length ____; Gradient of floor ____%.

(b) Position of water bearing stratum or strata with reference to mouth of tunnel ____

(c) Log of tunnel ____

11. GENERAL REMARKS: (Note any general or detailed information not covered above).

Set 4 1/2" O.D. casing to shut off the surface water formation & top and bottom holes so that [illegible] Drilled [illegible] 2" hole [illegible] casing to shut out surface water, [illegible] open hole and the total depth [illegible]

[illegible] FILED [illegible] STATE [illegible]

STATE OF UTAH,
COUNTY OF [illegible] } ss.

I, [illegible], being first duly sworn, do hereby swear that I have read the above and foregoing statement of facts; that I know the contents thereof and that the same are true to the best of my knowledge and belief.

[illegible]

Subscribed and sworn to before me this [illegible] day of [illegible], 19[illegible]

[illegible]

Form L29 010 5-49—Service Press

1/3/60

IN THE OFFICE OF THE STATE ENGINEER OF THE STATE OF UTAH

REQUEST FOR EXTENSION OF TIME
(After Fourteen Years)

APPLICATION NO. 13209

STATE OF UTAH } CITY OF WASHINGTON
COUNTY OF } DISTRICT OF COLUMBIA } ss.

A. van V. Dunn, being first duly sworn says that he is the agent of the owner of the above numbered Application; that he knows of his own knowledge that the construction of works as contemplated by the Application was actually commenced within 1 months after the date of approval of the Application, and the work has since been prosecuted with diligence.

The nature, extent and approximate cost of construction work done to this date, together with a detailed statement of use to which the water has been put, is as follows: (Describe briefly the type and extent of construction, whether impounding or diversion dam, or diverting channels and give the cost of construction. Indicate what part of the water, if any, covered by this Application has been put to beneficial use, the number of acres irrigated, etc. Mere statement as to general character of works costs and use will not answer—give details sufficient for one to determine what has actually been done.)

The nature, extent and estimated cost of construction remaining to be done to complete the work in accordance with the Application follows: (Describe with same details as required last above.) **Install pump and power unit at well No. 2 to provide 15 gpm capacity; construct 100,000 gallon distribution reservoir; and replace existing pipes with approximately 1500 ft. of 4" pipe, at total cost of approximately $15,000; and to complete proposed public and employee accommodations to permit the use of said water.**

(OVER)

In accordance with Application No. 13209, a spring, N. 24°38' W 2746 ft. from S¼ Cor. Sec. 26, T. 4 S., R. 23 E., SLM, was developed and diverted to 500 gal. dist. reservoir by 716 ft. of 1" G.I. pipe about 1934 at cost of about $2,000 as temporary water supply for Quarry Headquarters of Dinosaur National Monument, as established by proclamation of October 4, 1915 (39 Stat. 1752).
The surface spring flow was inadequate for headquarters of Monument as enlarged by proclamation of July 14, 1938 (53 Stat. 2454). To comply with state water laws and provide additional water, Application No. 13209 was filed to claim waters of a spring area including said spring, and to establish the right to divert such water before it emerged on the surface. Said application designated a test well as tentative point of diversion N. 28°10' W. 2814 ft. from said S¼ Cor. Sec. 26; and described the spring area as beginning N. 23°39' E. 2729.45 ft. from said S¼ Cor. Sec. 26; thence N. 4°43' W. 150 ft.; thence S. 85°17' W. 350 ft.; th thence S. 4°43' E. 200 ft.; thence N. 85°17' E. 350 ft.; and thence N. 4°43' W. 50 ft. to point of beginning. Part of the ties and courses were erroneously described and corrected before Application 13209 was accepted but tie to point of beginning was not properly corrected, thus describing a spring area approximately 0.5 mile east of spring and test well. Request is hereby made that the description of said spring area be corrected to begin at point N. 23°39' W. 2729.45 ft. from said S¼ Cor. Sec. 26. Both correct and incorrect locations of spring area are within homogenous tract of Federal land within Dinosaur National Monument and drain to Green River with no intervening private land.
Said test well No. 1 was dug to depth of 73 ft. from surface elevation 5190 with approximately 110 ft. of horizontal, exploratory tunnelling at the bottom, all completed about July 1, 1952, at cost of $2,500. Water was found in tilted, coarse sandstone 55 ft. north of shaft, yielding only about the same flow of 0.01 sec.ft. available at the original spring, and reduced the spring flow to practically zero during pumping.
To explore the tilting aquifer at a lower depth, and simplify drilling, a new well site, No. 2, was selected N. 28°24' W. 2802 ft. from said S¼ Cor. Sec. 26, and about 20 ft. from well No. 1. Pending further drilling, a concrete collecting sump was provided at aforesaid spring and the 1" pipe was replaced with 2" G.I. pipe at approximate cost of $1,700.
Due to wartime limitations, the test well No. 2 was deferred until 1951. In that year, the well was drilled to depth of 168 ft. from surface elevation 5160, cased with 42' of 8" and 65' of 6" pipe, and bailed at 10 gpm, or 0.022 sec.ft. by Garnett Birchell, who is reported to be a licensed well driller, at a cost of $1,332.69.
Project no included spring flow diverted and used and satisfactory well No. 2, not connected to system, at total cost of about $7,533.

Request is made for an extension of time [illegible] from **January 6** , 1955 to **January 1** , 1960. (Last date for submitting proof cannot exceed 50 years from date of approval of Application.) Reasons why extensions should be granted are: (Give reasons why the work could not be completed and the water put to beneficial use within the time heretofore allowed and why conditions now will permit the completion of the works and filing of proof within the time requested. Be specific in statement.

Congress and Bureau of the Budget have repeatedly reduced requested annual appropriations for construction in national parks and monuments since 1942 as war time and post-war economy measures. Appropriations for fiscal year 1955 and budget for fiscal year 1956 are already fixed for same reasons, with no provision for said project, although annual visting public served by water system has increased from 9133 in 1941 to 65,996 in 1954. Although emergency budget request is being submitted for 1956 fiscal year, full construction and use cannot be anticipated before about 1960.

Affiant upon oath states that he or the owner of the Application, whom he represents, has a bona fide intention and the financial ability to complete the works and to apply the water to beneficial use as provided in the Application, within the period of extension requested. ~~$25.00~~ $20.00 is tendered herewith for publishing notice to water users, ~~$ 20.00~~ The charge will be paid on receipt of bill after publication per State Engineer's letter of December 28, 1954.

A. van V. Dunn
Chief, Water Resources Section Applicant
National Park Service
(If applicant is a corporation, specify the title of the officer making the affidavit and affix corporate seal.)

Subscribed and sworn to before me this 3rd day of January 19 55.

Notary Public, D. C. Notary Public
My Commission Expires November 14, 1958

NOT TO BE FILLED IN BY APPLICANT

Application No. _____ Request due _____ Recd. _____
Applicant _____
Source _____
50 year period ends _____ Adv. fee ~~$25.00~~ $20.00 Recd. _____ by _____
Receipt No. _____
Hearing set for _____ at _____
Notice published weekly in _____
Beginning _____ and ending _____
Extension protested by _____

Request for extension approved / rejected ; time for submitting proof is hereby extended from _____ to and including _____

Date STATE ENGINEER

In reply refer to:
L54-L
Dino

REG. DIRECTOR
ASST. REG. DIRECTOR
CHF. DIV. OF ADMIN.
CHF. DIV. OF OPERATIONS
CHF. DIV. OF INTERP.
CHF. DIV. OF CONS. ACT.
FIELD SOLICITOR
ACTION TAKEN
Date 12/11/54

AIR MAIL December 9, 1954

Mr. Joseph M. Tracy
State Engineer
Salt Lake City, Utah

Reference: Permit 13209

Dear Mr. Tracy:

We propose to request an extension of time, in excess of 14 years, in which to complete the Quarry Headquarters Water System at Dinosaur National Monument under Permit No. 13209. This extension will require readvertising in accordance with Sec. 73-3-12 of the Water Code of 1953, as you have pointed out in connection with a similar request for extension of time under Permit 13619.

The application for Permit 13209 designated a spring from which water was, and still is, diverted for the claimed purposes, an incomplete dug well by which it was hoped to intercept all the spring flow and approximately an equal amount of ground water which did not reach the surface. Both sources were described as lying within a spring area. We note that the point of beginning of the spring area was erroneously described as northeast instead of northwest of the S½ of Sec. 26, thus placing the area nearly half a mile east of the spring and well. The same error in bearing was repeated in the published notice of 1940, and that notice omitted the reference to the existing direct diversion from the spring.

The well, shown as #1 Test Well, was started 5 years before the adoption of the ground water law of 1945, was dug to a depth of 73 feet, with exploratory tunnels, was found to yield approximately the same flow as the spring, but to only partially reduce the surface flow of the spring. The recognition of the spring as Diversion No. 1, and #1 Test Well as Diversion No. 2, disappointing results obtained in the development of that well, and a proposal to drill a second test well, shown as #2 Test Well on the drawing, were covered in a letter to you of March 29, 1951 from Mr. William E. Robertson, Acting Assitant Regional Director of this Service, in Omaha.

Dino
66-058

No. 2 Test Well was drilled to a depth of 168 feet and within 20 feet of #1 Test Well in 1951, as determined with more refinement since my letter of November 19, 1953 to you, and bailed at 10 gallons per minute. It was drilled under contract by Mr. Garnett Birchell of Vernal, Utah, who is reported to be a licensed well driller. We assume that he complied with the State ground water laws,

C. C. MAILED TO:
Supt. Dinosaur
By N E Robertson Date 12/15/54

REC'D IN GEN. FILES DEC 17 1954

but we do not have a copy of the required well driller's report. No pump and water system connections have been made because of restrictions on construction which have been imposed by the Bureau of the Budget and Congress, and the Monument Headquarters water supply is still obtained from the spring.

Several questions should be answered before the request is prepared. A print of our Drawing NM-DIN-6973 is enclosed for illustrative purposes.

1. Can the tie to the spring area be corrected without loss of priority in the application for extension of time in excess of 14 years?

2. Should the second well be treated as a replacement, or a change in point of diversion, and should the change be requested in the application for extension of time, or by other form of application?

3. Would the alternative types of form eliminate the need for extension of time beyond 14 years with any reduction in the cost of advertising?

4. What claim should be included in any application to shift the emphasis from a single point of diversion at a well to the spring area with alternative diversions at the spring and well, and what effect would it have on the priority of right?

5. Is it possible to obtain final certificate now, to the spring flow which varies between 4 and 4.5 gallons per minute, and is fully used at times, without loss of priority and right to the rest of the claimed 0.02 sec.ft. with or without the proof map of the existing system.

6. Would it be possible to provide for alternative diversions of 4.5 gpm from the spring or No. 2 well either in the license for the spring flow or the subsequent proof and license for the water from the well.

7. How significant would the loss of 14 years of priority in rights to the underground water rights be since our well logs indicate that both wells derive their water from aquifers in sand stone extending well below the aluvial deposits in the Green River channel?

8. How adequate a right could be established to an additional 0.01 sec.ft. if:

   a. We treated the permit 13209 as relating to 0.02 sec.ft. of ground water, and filed a new application to surface spring flow.

b. We treat the permit, as intended, as a claim to the surface and ground water of the spring area, and file a new application for the appropriation of an additional 0.01 sec.ft. from No. 2 Test Well, which appears to be available?

Since it is essential to act before January 6 to salvage any part of the 1940 priority, we shall appreciate an immediate reply, and 6 copies of any application forms you consider appropriate. We should also like to know the cost of a copy of the well driller's report, which we assume you have, in order that a purchase order may be prepared. (We do not need such report before January 6, as we have adequate well records for immediate use). We shall also need an answer to the questions concerning the $20.00 charge for advertising applications for extensions of time in excess of 14 years, which were presented in our letter of December 8 concerning the similar application for extension of time to perfect rights under Permit 13619.

Sincerely yours,

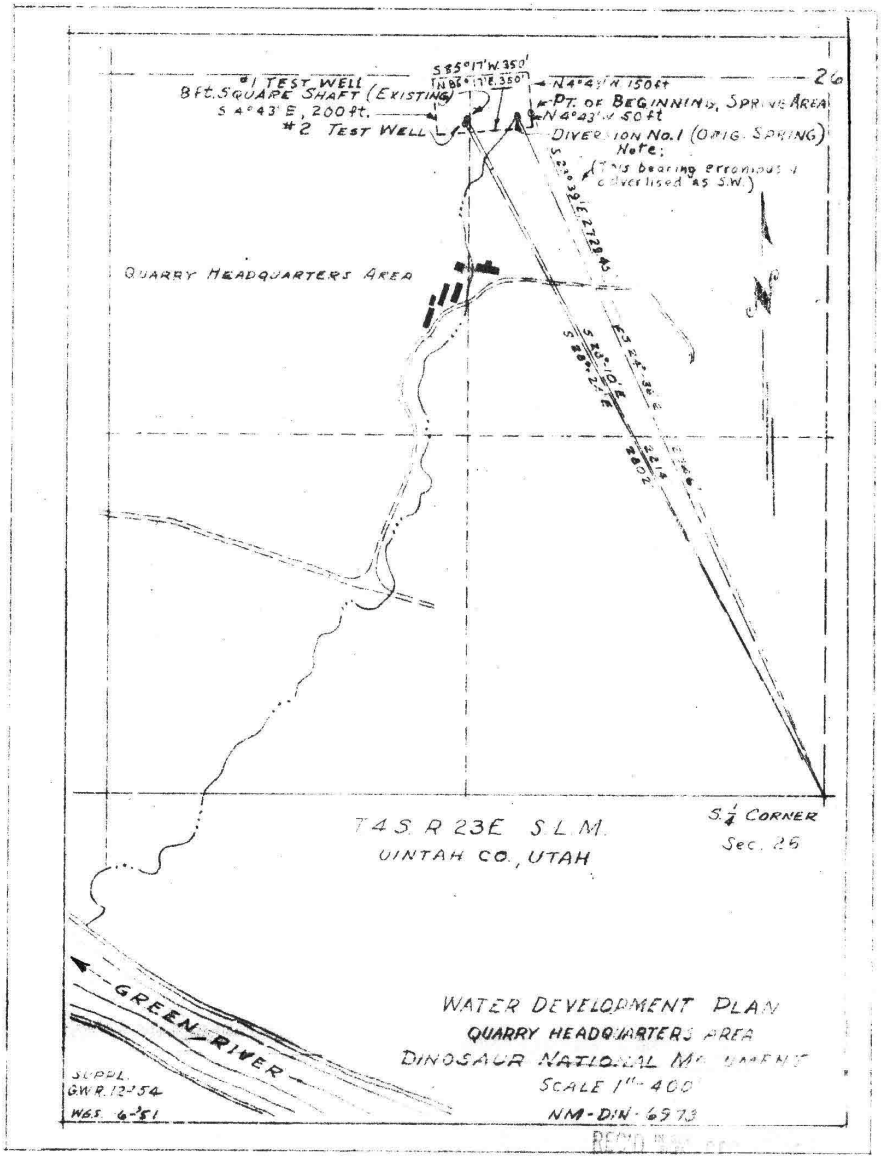
(SGD.) A. VAN V. [illegible]

A. van V. Dunn
Chief, Water Resources Section

Copy to: Regional Director, Region Two (2)
Western Office of Design and Construction

REC'D IN GEN. FILES DEC 17 1954

00-00-0000: sketch of quarry headquarters



04-27-1954: memorandum to regional director regarding water right permit no. 13209

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DINOSAUR NATIONAL MONUMENT
BOX 621, VERNAL, UTAH

L54-LDINO

RECEIVED APR 30 1954 NPS REGION TWO

April 27, 1954

Memorandum

To: Regional Director, Rocky Mountain Region

From: Superintendent, Dinosaur National Monument

Subject: Water Right Permit No. 13209, Docket 1, Dinosaur National Monument.

As per the last paragraph of Mr. McLaughlin's Memorandum of April 21 to the Director I am supplying information on the maximum visitor count at Dinosaur National Monument. headquarters, quarry area.

The maximum number of visitors to the quarry area headquarters of Dinosaur National Monument is in excess of 400, with an average of 205 per day for the two months of July and August 1953. I anticipate the average visitor use will run in excess of 300 per day for July and August 1954.

Jess H. Lombard
Superintendent

In duplicate

C. C. MAILED TO:
WASO
By AFI Date 5-3-54

REG. DIRECTOR
ASST REG DIR ADM
ASST REG DIR D&C
~~ASST REG DIR~~
ADM. OFFICER
ASST. ADM. OFFICER
COUNSEL
CONCESSIONS MGT.
FORESTRY
ARCHITECTURE
ENGINEERING
LANDS ARCH.
PROGRAMMING
HISTORY
NAT. HIST.
LANDS AFI
RIV. BASIN R. C. SUR.
REG. DIR. SEC'Y
ACTION TAKEN
FILE AFI 5-3-54

RECD FILES MAY 6 19

✓

L54-4 DINO

APR 21 1954

Ingalls 4-20-54
Edgar 4-20-54
Hall 4/21
Oh McEwan Allen 4/21

Memorandum

To: The Director

From: Assistant Regional Director, Region Two

Subject: Water Right Permit No. 13209, Docket 1, Dinosaur National Monument

This memorandum is in reply to Mr. Allen's of March 26 regarding the subject water right permit, which was misdirected to the Regional Director, Region Three.

The attached undated copy of Well Driller's report to the Utah State Engineer by Mr. Birchell was received in this office with a memorandum of January 8, 1952 from Mr. LaHouse. The well drilling was completed on December 17, 1951 and the report may have been made by Mr. Birchell late in December, 1951 or early in January, 1952. While our files do not disclose whether or not he is a licensed well driller, the fact that he submitted a report to the State seems to indicate that he is.

With regard to Mr. Allen's next to the last paragraph, there is a 2" water line from the existing spring to the present temporary buildings in the headquarters area. It has no connection with Well No. 2 which is capped and will be unused until a new water system is laid. The 1956 construction program for Dinosaur National Monument contains an item for the construction of a new water system but it was not sufficiently high in priority to gain a place on the 1956 regional priority list.

Respecting the last sentence in Mr. Allen's memorandum, the flow available from the spring during the tourist season is 4--4½ gallons per minute, and the permanent population will probably not exceed 25 people at the present quarry area if current proposals regarding headquarters in Vernal are carried out.

REC'D IN CENTRAL FILES MAY 3 1954

By copy of this memorandum, we are asking Mr. Lombard to supply us with the maximum daily visitor count, and when this information is received, we will pass it on to you.

(Sgd) John S. McLaughlin
John S. McLaughlin
Assistant Regional Director

In duplicate

Attachment

Copy to: Supt., Dinosaur NM
w/c Allen's memo
& attachments

GFIngalls:mn

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON 25, D. C.

In reply refer to:
L54-L D/NO

RECEIVED
APR 1 1954
REGION TWO
NPS

MAR 26 1954

Memorandum

To: Regional Director, Region Three

From: Assistant Director

Subject: Water Right Permit No. 13209, Docket 1, Dinosaur National Monument

Attached are three copies each of Request for Extension of Time to complete the Quarry Headquarters Water System, chart showing trend of attendance at Dinosaur National Monument, and the State Engineer's Notice of Extension of Time, for filing in Docket No. 1, in your office, at Rocky Mountain, and at the Monument. Also attached are three copies of our letter of November 19, 1953, to the State Engineer, forwarding the Request for Extension of Time.

You will note that the extension is to the end of the 14-year period. Mr. Tracy has explained the procedure for further extensions in the forwarding letter of March 12, of which three copies are also attached. The letter does not fully answer our inquiries of November 19, 1953, but it appears that we must report diligent development over the past 14 years, and readvertise the claim.

Some progress can be reported as the drilling of the second test well. But we should have the information from which to establish compliance with the ground water laws. Mr. Dunn does not recall just why no well driller's report was filed under the ground water law of 1937, when the water right application was filed in 1940, but he believes that the lack was overlooked by the State Engineer because the first well was only exploratory and dug by the United States.

The State Engineer seems to have been notified of the intent to drill Well No. 2, by letter of March 29, 1951, from Mr. Robertson, but we have no copy of the State Engineer's reply. Have we copies of any well driller's report, or information as to

REG. DIRECTOR
ASST REG DIR ADM
ASST REG DIR D&C
ASST REG DIR
ADM. OFFICER
ASST. ADM. OFFICER
COUNSEL
CONCESSIONS MGT.
FORESTRY
ARCHITECTURE
ENGINEERING
LAND ARCH.
PROGRAMMING D&C
HISTORY
NAT HISTORY
LANDS
RIV. BASIN REC. SUP.
REG. DIR. SEC'Y
c.c. to Reg. Atty
ACTION TAKEN
FILE

00-00-0000: stamp of receival



whether the driller, Mr. Garnett Birchell, was licensed, or filed such a report. Please supply us with as much of the information as is available in the Park Service record, or may be obtained from Mr. Birchell, in order that we may decide how to present the matter to the State Engineer.

We should also like to have a description of the existing water system and status of Well No. 2, and your suggestions as to the possible construction which might be included in the 1956 program to reflect some plans to make that well available to the water system.

In his letter of November 19 to the State Engineer, Mr. Dunn inquired about obtaining the final license on less than 0.02 second-foot for domestic purposes, without full proof. The accompanying reply does not cover the licensing of less than 0.02 second-foot because water is used for purposes other than domestic. We should like to know the maximum flow available from the spring during the tourist season, the permanent population, and maximum daily visitor count, in order to determine whether we could perfect rights to most of the claimed 0.02 second-foot and initiate a new right to the well for a supplemental supply.

4-4½ gals per minute 25 max. persons pop.

Assistant Director

In triplicate

Attachments 15

10 sheets found separate & mail

04-00-1954: stamps of receival





C O P Y

THE STATE OF UTAH
OFFICE OF STATE ENGINEER
SALT LAKE CITY

March 12, 1954

Joseph M. Tracy
State Engineer

United States of America
Department of the Interior
National Park Service
Washington 25, D. C.

ATTENTION: A. van V. Dunn, Chief, Water Resources Branch

Gentlemen: RE: APPLICATION NO. 13209

In response to your letters of November 19, 1953 and February 19, 1954, there is enclosed Notice of Extension Granted with regard to the above numbered application, wherein it is stated that the time for submitting Proof of Appropriation has been extended from December 25, 1953, to January 6, 1955, inclusive, which is the end of the 14-year period.

In response to your inquiry with regard to further extensions of time after the 14-year period, please be advised that the State Engineer may grant further extensions upon sufficient showing of diligence in an effort to pursue the application to completion. Such requests for extension of time, however, must be published at the applicant's expense, in accordance with Section 73-3-12, Utah Code Annotated, 1953.

In your letter of November 19, 1953, you raise the question as to whether or not the appropriation under this application can meet the requirements of that portion of Section 73-3-16, Utah Code Annotated, 1953, wherein it is stated that the State Engineer shall require no Proof of Appropriation or Proof of Permanent Change wherever the application for appropriation of underground water or a permanent change thereof is for domestic and for livestock purposes and a flow of 0.015 sec.-ft. (6.73 g.p.m.) or less.

Upon review of Application No. 13209, it appears that you are attempting to appropriate 0.02 sec.-ft. of water from a spring area by diverting from either a surface spring or from developed underground sources and that the water is to be used not only for ordinary domestic purposes but for use in shops, garages and fire protection purposes. It would seem, therefore, that this application could not meet the above mentioned requirements of Section 73-3-16, unless the source was limited strictly to underground water, with the elimination of any appropriation of the surface water from the spring and that the use be limited solely to domestic use.

If it is your intention to appropriate and use the full .02 sec.-ft. of water, whether surface or undergroumd, from the spring area covered by this application, then it is suggested that you proceed under the application as it presently stands.

If we can be of any further help with regard to this matter, please do not hesitate to write.

Yours truly,

/s/ Joseph M. Tracy

Joseph M. Tracy
STATE ENGINEER

FTM/vm
Enc:Extension Granted Notice

FORM L19 10-51 10M

L64

THE STATE OF UTAH
OFFICE OF STATE ENGINEER
SALT LAKE CITY

March 1, 1954

United States of America
Department of the Interior
National Parks Service
Washington 25, D. C.

ATTENTION: A. van V. Dunn, Chief, Water Resources Branch

Gentlemen: RE: APPLICATION 13209

Request for Extension of Time in which to submit Proof of Appropriation or Proof of Change contemplated by the above application has been considered and the time for receiving proof is hereby extended from December 25, 1953 to January 6, 1955, inclusive, which is the end of the 14-year period.

Yours truly,

Joseph M. Tracy

Joseph M. Tracy
STATE ENGINEER
403 STATE CAPITOL
SALT LAKE CITY 1
UTAH

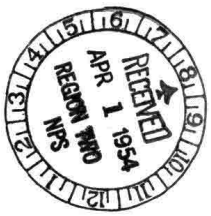
ADDRESS ALL COMMUNICATIONS TO:

le

EXTENSION GRANTED

P. S. Although this extension is granted in accordance with the provisions of the law, I earnestly recommend that you proceed to prepare and submit proof at the earliest possible date. One cannot foresee what contingencies might arise in the future; the present possession of your certificate might stand you in good stead.

04-00-1954: stamp of approval



02-19-1954: letter to joseph m. tracy regarding water right application 13209



In reply refer to:
L54-L

February 19, 1954

Mr. Joseph M. Tracy
State Engineer
State Capitol
Salt Lake City 1, Utah

Subject: Water Right Application 13209, Dinosaur National Monument

Dear Mr. Tracy:

By letter of November 12, 1953, I requested forms for applications for extension of time. By letter of November 19 I submitted an application for extension of time in which to perfect rights under Application 13209, at Dinosaur National Monument, calling attention to the fact that this would be the last extension within the statutory 14 years. Information was requested as to procedure for obtaining further extensions of time, and as to possible procedure to perfect rights without proof under Sec. 100-3-16 of the State Water Code.

About the first of December, we received two sets of forms, for extensions of time within the 14-year period, and for extensions beyond that limit. There was no forwarding letter, and we have not yet received word of any action on the request for extension which I executed on November 12 and submitted with the letter of November 19. Please advise us of any variation in your records and the status of the application for extension to January 6, 1955, the apparent end of the 14-year limit.

Sincerely yours,

(SGD.) A. VAN V. DUNN,

A. van V. Dunn
Chief, Water Resources Section

Copy to: Regional Director, Region Two (3)

C. C. MAILED TO:
By ... Date 2-26

REC'D IN GEN. FILES MAR 1 1954

REG. DIRECTOR
ASST REG DIR ADM
ASST REG DIR D&C
ASST REG DIR
ADM. OFFICER
ASST. ADM. OFFICER
COUNSEL
CONCESSIONS MGT.
FORESTRY
ARCHIT...
ENGIN...
LAND
PROGR...
HISTORY
NAT. RIVERWAY
LAND...
RIV. ...SIN R. C. SUR.
REG. D.R. SEC'Y
ACTION TAKEN
FILE

Form L25 7M 10-50
ARROW PRESS

IN THE OFFICE OF THE STATE ENGINEER OF THE STATE OF UTAH

REQUEST FOR EXTENSION OF TIME
(Strike words not needed)
(Before Fourteen Years)

APPLICATION NO. 13209

CITY OF WASHINGTON
)
DISTRICT OF COLUMBIA) ss.

A. van V. Dunn, being first duly sworn says that he is the agent of the owner of the above numbered Application; that he knows of his own knowledge that the construction of works as contemplated by the Application was actually commenced within one month after the date of approval of the Application, and that the work has since been prosecuted with diligence.

The nature, extent and approximate cost of construction work done to this date, together with a detailed statement of use to which the water has been put, is as follows: (Describe briefly the type and extent of construction, whether impounding or diversion dam, or diverting channels and give the cost of construction. Indicate what part of the water, if any, covered by this Application has been put to beneficial use, the number of acres irrigated, etc. Mere statement as to general character of works, costs and use will not answer,—give details sufficient for one to determine what has actually been done.)

One exploratory well was dug, as last reported in request for extension of time dated November 2, 1948. The source of supply proved inadequate as work proceeded. A second exploratory well was drilled to a depth of 168 feet in 1951, at point whence S1/4 Cor. Sec. 26, T. 4 S., R. 23 E., S.L.M., bears S. 28°24' E. 2802 feet, to intercept a better cross-section of the aquifer. This well has been baled at 10 gallons per minute for 5 hours, but no use has been made of this well to date. Limited supplies of water are now diverted from the system as described in earlier requests for extensions of time, and fully used at the Quarry Headquarters of Dinosaur National Monument.

The nature, extent and estimated cost of construction remaining to be done to complete the work in accordance with the Application follows: (Describe with same details as required last above.)

The construction of the enlarged pipe line to Well No. 2, and construction of the distribution reservoir, were estimated to cost $15,000 in 1942, and are now estimated to cost $34,900.

(OVER)

Request is made for reinstatement and extension of time for filing (Strike words not needed)
proof from December 25 , 19 53 , to January 6 , 1955 . Reasons why extension should be granted are: (Give reasons why the work could not be completed and the water put to beneficial use within the time heretofore allowed and why conditions now will permit the completion of the works and filing of proof within the time requested. Be specific in statement.)

Restrictions imposed by Congress and the Bureau of the Budget have prevented the completion of the water system and the full use of the water.

Affiant upon path states that he or the owner of the Application, whom he represents, has a bona fide intention and the financial ability to complete the works and to apply the water to beneficial use as provided in the Application, within the period of extension requested.

United States of America

By: A. van Dorn

Chief, Water Resources Branch, Applicant

National Park Service

(If a corporation, specify the title of the officer making the affidavit and affix corporate seal)

Subscribed and sworn to before me this 12th day of November 1953

My Commission Expires Dec. 14, 1955

Alfred L. Pace

Notary Public

NOT TO BE FILLED IN BY APPLICANT

Application No._____ Request due_____ Recd._____

Applicant_____

Source_____

14 year period ends_____

Request for extension approved / rejected ; time for submitting proof is hereby extended from _____ to and including_____

_____ Date

_____ STATE ENGINEER

In reply refer to:
L54-L

November 19, 1953

Mr. Joseph M. Tracy
State Engineer
State Capitol
Salt Lake City 1, Utah

Dear Mr. Tracy:

The accompanying application is for extension of time to complete the water system under Application No. 13209 to the end of the statutory 14-year period. Within that remaining period we shall appreciate having your suggestions as to further procedure.

The initial well, covered by the Application No. 13209, was found to intercept only a small portion of the aquifer. A second test well was drilled well within 150 feet of the first, during 1951. Under Section 100-3-28 of the State Water Code, the field engineers did not see fit to report the minor change in location until the "final construction report" on the exploratory drilling was submitted considerably later. A 5-hour pump test showed a yield of 10 gpm, but due to limitations imposed by Congress and the Bureau of the Budget, no further tests, and no pipe line extensions to permit the use of the well, have been made.

Since backfilling the initial well, the flow of the original spring has returned to about 0.01 second-foot, and has been used as the sole source of supply despite the susceptibility to contamination during periods of flood runoff. Under the Federal economy restrictions now in force, it will probably be some years before the water system can be completed.

Attached is a print of a chart showing the actual annual attendance at Dinosaur since 1937, and the slope of the 1927-1951 attendance curves for seven major western national parks. The individual curves for the parks have actually followed the indicated slope very closely except for the first few years of the depression and the Second World War, although the unit values are in hundreds of thousands of visitors per year. The limited records for Dinosaur National Monument, as shown, suggest a retarded use until this past year, probably very largely due to the failure of the United

States to provide adequate public facilities, including sleeping and eating facilities, and water supplies. The jump in 1953 attendance is similar to that in many of the parks, which are also suffering from inadequate facilities, and suggests that the increasing population must accept the inadequate facilities if it is to enjoy the national parks and monuments at all.

The combination of circumstances suggests that we should not restrict water rights by premature proof on inadequate water systems. Section 100-3-12 of the Water Code provides a 50-year limit to extensions of time under certain conditions which are not fully explained. We shall appreciate advice as to the nature of showings which must be made to extend development periods to a length of twenty years or so, if necessary.

As a further consideration, although we have applied for rights to 0.02 second-foot, we have a well which yielded about that quantity for only the one test of record, and a spring with a reliable flow of only half of that amount. We note, under Section 100-3-16 of the Water Code that no proof is needed for the diversion of 0.015 second-foot of ground water for domestic purposes. Accordingly, we wonder if the present use, the evidence of need, and the records of past efforts to tap the spring sources nearer its origin in larger quantities, might not be presented in a form to establish the right to 0.015 second-foot of water in the area including the spring and test wells during the next year if you grant the requested extension of time.

Sincerely yours,

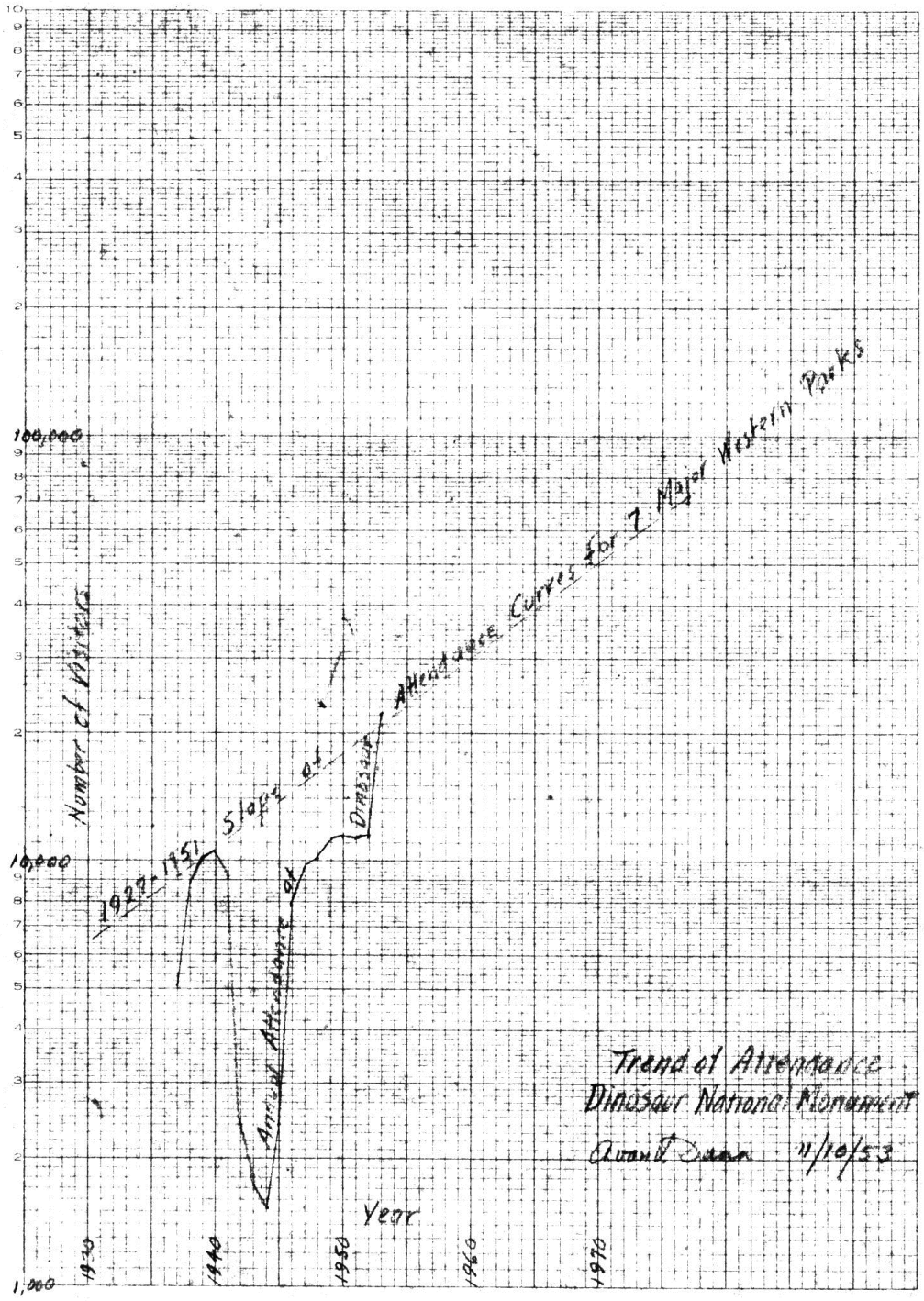
(SGD.) A. VAN V. DUNN

A. van V. Dunn
Chief, Water Resources Branch

Enclosures 2

Copy to: Regional Director, Region Two (3), with 3 sets of attachments

00-00-0000: trend of attendance graph



10-02-1953: letter to joseph m. tracy regarding accompanying application for extension of time

D R A F T

In reply refer to:
L54-L

October 2, 1953

Mr. Joseph M. Tracy
State Engineer
State Capitol
Salt Lake City 1, Utah

Dear Mr. Tracy:

The accompanying application is for extension of time to the end of the statutory 14-year period. Due to limitations of Congress and the Bureau of the Budget it is doubtful, however, whether the water system will be completed by that date. We have other water developments in the same incomplete condition, with permits nearly 14 years old.

Section 100-3-12 of the water laws provide a 50-year limit under certain conditions which are not fully explained. With the increasing public use of the national parks and monuments, the water systems will have to be completed within a few years. However, it is evident that we shall either have to make proofs on inadequate quantities of water and initiate supplemental, inferior rights, or obtain extensions of time somewhat in excess of 14 years.

We shall appreciate advice as to the nature of showings which must be made to extend development periods to a length of 18 or 20 years.

Sincerely yours,

A. van V. Dunn
Chief, Water Resources Branch

Enclosure

10-21-1953: memorandum to the director regarding quarry headquarters water system

✓

L54-L DINO Gratton 10-20

OCT 21 1953

Memorandum

To: The Director

From: Assistant Regional Director, Region Two

Subject: Quarry Headquarters Water System, Docket No. 1, Dinosaur National Monument

Mr. Allen's memorandum of October 6 supplied, for our comments and approval, a proposed application and letter of transmittal to the Utah State Engineer in connection with obtaining an extension of time in which to complete the Quarry Headquarters Water System at Dinosaur National Monument. Also in this connection, he asked for a full description of the present status of the water system and use of both wells and spring together with reasons, other than those offered in the application for extension of time, for the delay in completing the system, and possible revision of the construction program to meet the requirements of the Utah water laws.

Application No. 13209 claimed a right to .02 second-foot of water from the original spring and the test well but proof of beneficial use of this amount depends on certain construction as described in the application. The headquarters water system is presently supplied entirely by the spring and no use can be made of water from the well without an expenditure of about $35,000 to complete the system as programmed for some more distant future in proposal U-3-4. The available flow from the spring is understood to be not more than about .01 of a second-foot. According to your memorandum of October 24, 1949, the Utah ground water law makes it unnecessary to submit final proof for the appropriation of less than .015 of a second-foot of water from a well for domestic or stock watering purposes. You suggested the possibility of perfecting the water right without proof by declaring that not more than .015 of a second-foot seems to be available for use within the particular spring area. If we understand correctly, all that we would actually gain by making required proof under the terms of Application No. 13209 is establishment of priority to an additional .005 second-foot.

Records Section OCT 22 1953

In the absence of competition for water from the spring area, it is not clear to us why any importance should be attached to a priority of use for this rather small quantity. Since it seems highly unlikely that we can obtain an extension beyond January 6, 1953 and we see no chance of being able to proceed by that date with the construction contemplated in the original application, we question whether an application for extension of time is warranted. Would it not be just as well to sacrifice the old priority to .005 of a second-foot with a view to perfecting the right to .015 of a second-foot, without proof, and making a new filing on the additional amount if and when it is determined that the well is essential to the water system and that funds can be made available to put it in use?

There may be technical aspects to this matter that we do not clearly understand. If you conclude that a request for the further, but rather short, extension of time is warranted, we have no objections to the contents of the letter of transmittal nor of the application itself except that it mentions diversion from the spring and first well whereas we believe the diversion is entirely from the spring. We do not believe we can add any information to what you already have on the present status of the water system. There has been no change for some years. We can think of no reasons, other than those offered in the application, for delay in completing the system and do not believe it practicable to revise the construction program to meet the January 6, 1955 deadline for submitting proof if the application were to be extended to that date.

By copy of this memorandum to the Superintendent we are asking him to submit any comments he might have that would throw other light on the matter.

(Sgd) John S. McLaughlin

John S. McLaughlin
Assistant Regional Director

In duplicate

Copy to: Supt., Dinosaur NM
w/copy Allen's memo
and attachments

WaGratton:mn

RECEIVED OCT 8 1953 REGION TWO

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON 25, D. C.

In reply refer to: L54-L

REG. DIRECTOR
ASST REG DIR ADM
ASST REG DIR D&C
ASST REG DIR
ADM. OFFICER
ASST. ADM. OFFICER
COUNSEL
CONCESSIONS
FORESTRY
ARCHITECTURE
ENGINEERING
LAND
PROGRAMS
HISTORY
MAINTENANCE
PERSONNEL
R.C. SUR.
REG DIR. SECY
ACTION TAKEN
FILE

OCT - 6 1953

Memorandum

To: Regional Director, Region Two

From: Assistant Director

Subject: Quarry Headquarters Water System, Docket No. 1, Dinosaur National Monument

It will be necessary to make proof for license, or obtain an extension of time in which to complete the Quarry Headquarters Water System at Dinosaur National Monument by December 25. We will request an extension of time as indicated in the attached copies of proposed application and letter of transmittal, which are submitted for your prior comments or approval.

The application No. 13209 was filed on January 2, 1940, and approved on January 6, 1941. The application will have been on record for 14 years on January 2, 1954, and the approved permit will have been in effect for 14 years on January 6, 1955.

Under Section 100-3-12 of the compiled water laws, extensions of time beyond January 6, 1955, will be extremely difficult. The law states that extensions for 14 years may be granted on proper showing of diligence or reasonable cause for delay.

We have just received an extension of time in which to complete the Yovimpa Springs Water System at Bryce Canyon, granted to the end of the 14-year period and so indicated. The warning has significant implications which we hope to have clarified in answer to Mr. Dunn's proposed letter of transmittal.

The second Quarry Headquarters well is probably not in good standing because it was drilled in 1951 without the prior knowledge of the Water Resources Branch or the prior request for drilling permit. Proposal U-3-4, for the completion of the system at $34,900 is not even included in the 1955 program. Regional priority No. 84, for some date after 1955, calls for the expenditure of only $29,700, which will still leave the project incomplete.

OCT 8 1953

C. C. MAILED TO:
Dinosaur
Vernal
By MN Date 10-20

Please give us a full description, with sketches if necessary, of the present status of the water system and the use of both wells and the spring. Also supply reasons, other than those offered, for the delay in completing the system, and possible revision of the construction program to meet the requirements of the Utah water laws.

Mr. Dunn also finds that $2,100 has been allotted for 1954 for wells at Pat's Hole and other public use areas. If such wells are to be dug or drilled this year, please send data similar to those in the application in Docket 1 by which applications can be prepared.

Assistant Director

In triplicate

Attachments 2

11-12-1948: extension granted

Form L19 2000 28-9-45

Dunn

Vic

THE STATE OF UTAH
OFFICE OF STATE ENGINEER
SALT LAKE CITY
November 12, 1948

~~MX~~ U. S. National Park Service
Department of the Interior
Washington, 25, D. C.

4 17

Dear Sir~~s~~: RE[redacted]: EXT. GRANTED APPLICATION NO. 13209

This will acknowledge receipt of your request of November 2, 1948 for Extension of Time in which to submit Proof of Appropriation or Proof of Change contemplated by Application No. 13209 [redacted]

EXTENSION GRANTED

The matter has been considered and the time for submitting proof has been extended from December 25, 1948 to December 25, 1953 inclusive.

Yours very truly,
Ed N. Watson
STATE ENGINEER

ADDRESS ALL COMMUNICATIONS TO:
tm

403 STATE CAPITOL
SALT LAKE CITY, UTAH

a

Form L25 3M 7-43

IN THE OFFICE OF THE STATE ENGINEER OF THE STATE OF UTAH

REQUEST FOR ~~REINSTATEMENT AND~~ EXTENSION OF TIME
(Strike words not needed)
(Before Fourteen Years)

APPLICATION NO. 13209

CITY OF WASHINGTON
~~STATE OF UTAH~~)
~~COUNTY OF~~ DISTRICT OF COLUMBIA) ss

A. van V. Dunn, being first duly sworn says that he is ~~the owner or~~ the agent of the owner of the above numbered Application; that he knows of his own knowledge that the construction of works as contemplated by the Application was actually ~~commenced~~ continued within one 6 months after the date of approval of the Application, and that the work has since been prosecuted with diligence.

The nature, extent and approximate cost of construction work done to this date, together with a detailed statement of use to which the water has been put, is as follows: (Describe briefly the type and extent of construction, whether impounding or diversion dam, or diverting channels and give the cost of construction. Indicate what part of the water, if any, covered by this Application has been put to beneficial use, the number of acres irrigated, etc. Mere statement as to general character of works, costs and use will not answer,—give details sufficient for one to determine what has actually been done.)

Construction is approximately at the stage described in the application for extension of time by George W. Fry, Acting Superintendent of Rocky Mountain National Park, subscribed December 2, 1942. Work has been suspended during the war and the recent postwar period, because the United States has had to direct all of its resources toward the war effort, the alleviation of the national housing shortage, and the stabilization of the national economy.

Some features of the development are being resumed during the current fiscal year, and extensive appropriations have been included in the budget for 1950.

The nature, extent and estimated cost of construction remaining to be done to complete the work in accordance with the Application follows: (Describe with same details as required last above.)

The required additional work is approximately as described in the application for extension of time in 1942.

Original forward to State Engineer of Utah 11/2/48.
3 copies forwarded to Region Two 11/3/48

(OVER)

Request is made for reinstatement and extension of time for filing
(Strike words not needed)
proof from December 25 , 1948 , to December 25, , 19 55 . Reasons why extensions should be granted are: (Give reasons why the work could not be completed and the water put to beneficial use within the time heretofore allowed and why conditions now will permit the completion of the works and filing of proof within the time requested. Be specific in statement.)

The need for the completion of the water system is real. The accommodations for the public, and for the resident Federal employees, are inadequate, and cannot be extensively improved until the water supply, with better head and better regulatory storage, is provided. The war, and subsequent national social and economic conditions, which are beyond the control of the National Park Service, have prevented such essential action.

Affiant upon oath states that he or the owner of the Application, whom he represents, has a bona fide intention and the financial ability to complete the works and to apply the water to beneficial use as provided in the Application, within the period of extension requested. ~~A filing fee of $1.00 is tendered herewith.~~ United States of America, Department of the Interior, National Park Service,

By: (Sgd) A. van V. Dunn.

Chief, Water Resources Branch Applicant

(If a corporation, specify the title of the officer making the affidavit and affix corporate seal)

Subscribed and sworn to before me this 2nd day of November, 1948.
19

(SEAL)

(Sgd) Lorin A. Davis

My commission expires Nov. 14, 1951. Notary Public

NOT TO BE FILLED IN BY APPLICANT

Application No._____ Request due_____Recd._____
Applicant_____ Filing fee $1.00 Recd._____by____
Source_____ Receipt No._____
14 year period ends_____

Request for extension approved / rejected ; time for submitting proof is hereby extended from_____to and including_____

_____ _____
Date STATE ENGINEER

10-21-1948: proof as contemplated by application no. 13209

Form L21 7000 8-47

THE STATE OF UTAH

OFFICE OF STATE ENGINEER
SALT LAKE CITY

U. S. National Park Service
Department of the Interior
Washington, 25, D. C.

Oct. 21, 1948

Gentlemen: RE: APPLICATION NO. 13209.

Proof as contemplated by Application No. 13209 will be due December 25, 1948 . Such proof, together with maps, profiles and drawings and the statutory filing fees, must be received in this office on or before that date. "Failure to make proof of appropriation or proof of change of water on or before the date set therefor, shall cause the Application to lapse." (Section 100-3-17 Utah Code Annotated 1943.)

Blank forms upon which proof must be submitted and a copy of the Rules and Regulations will be sent upon request. Upon receipt of the proof it will receive an office examination after which a field inspection will follow.

PROOF DUE

An extension of time for filing proof will be granted only upon the filing of a written request for extension made in affidavit form, showing diligence or a reasonable cause for delay and containing the following information:

1. Amount of work done and approximate cost.
2. Amount of work remaining to be done and its estimated cost.
3. Reason for extension and time desired.

Yours very truly,

E. N. Watson

ADDRESS ALL COMMUNICATIONS TO: STATE ENGINEER
403 STATE CAPITOL
SALT LAKE CITY 1, UTAH

ba
enc.:fl-25

Dinosaur – Deed 3

COPY

THE STATE OF UTAH
Office of State Engineer
Salt Lake City
January 26, 1943.

U. S. National Park Service
Water Rights Section
601 Sheldon Building
San Francisco, Calif.

Dear Sir: REL: EXT. GRANTED APPLICATION NO. 13209

This will acknowledge receipt of your request of Dec. 2, 1942, for Extension of Time in which to submit Proof of Appropriation or Proof of Change contemplated by Application No. 13209, together with filing fee of $1.00.

The matter has been considered and the time for submitting proof has been extended from February 5, 1943, to December 25, 1948, inclusive.

Yours very truly,

/s/ Ed. H. Watson

ADDRESS ALL COMMUNICATIONS TO:

STATE ENGINEER
403 STATE CAPITOL
SALT LAKE CITY, UTAH

Extra

Mr. Dunn.

UNITED STATES

DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE
WATER RIGHTS SECTION
SAN FRANCISCO, CALIF.

601 Sheldon Building

December 14, 1942.

State Engineer,

Salt Lake City, Utah.

Dear Sir:

This will acknowledge receipt of your letter of December 9, together with a voucher to cover the application for extension of time in the matter of Water Right Application No. 13209 covering diversion at Dinosaur National Monument. We will see that this voucher is paid within the next few days.

You will notice that the application was forwarded by the Superintendent before we had time to act on the suggestions in your letter of December 1 with regard to the time limit requested. No doubt, however, since we made our request entirely in compliance with Section 100-3-12 of the water code, it is not really necessary to make any changes and if, for administrative reasons, you find it necessary to reduce the time limit, such reduction can be covered by your permit for the extension.

We should, however, like to call your attention to the extremely unusual conditions existing at this time which will affect not only the federal developments but all private construction as well. As we understand it, you now grant only a five-year period and we may obtain another extension of the same amount in 1947 if it is necessary. On the other hand, if you were to grant the thirteen-year limit which we requested, we should still make every effort to complete the system within the five-year period if the war is terminated and labor and materials become available within that period. The question is, therefore, one of reducing clerical work both in your office and ours during the war period.

Yours very truly,

A. van V. Dunn,
Hydraulic Engineer.

cc: Director.
Region Two.
Supt., Rocky Mt.
Custodian, Dinosaur N.M.,
through Supt., Rocky Mt.

Form L25 2M 9-42

IN THE OFFICE OF THE STATE ENGINEER OF THE STATE OF UTAH

REQUEST FOR REINSTATEMENT AND EXTENSION OF TIME
(Strike words not needed)
(Before Fourteen Years)

APPLICATION NO. 13209

STATE OF UTAH)
COUNTY OF_____) ss

George W. Fry, being first duly sworn says that he is the owner or the agent of the owner of the above numbered Application; that he knows of his own knowledge that the construction of works as contemplated by the Application was actually commenced within 6 months after the date of approval of the Application, and that the work has since been prosecuted with diligence.

The nature, extent and approximate cost of construction work done to this date, together with a detailed statement of use to which the water has been put, is as follows: (Describe briefly the type and extent of construction, whether impounding or diversion dam, or diverting channels and give the cost of construction. Indicate what part of the water, if any, covered by this Application has been put to beneficial use, the number of acres irrigated, etc. Mere statement as to general character of works, costs and use will not answer,—give details sufficient for one to determine what has actually been done.)

A concrete collecting sump has been provided at diversion No. 1 and 1000' of 2" G.I. pipe have been layed to the place of use and both are in operation to supply all water used at the Quarry headquarters of the monument, but none is available for irrigation.

A shaft, 6' in diameter, has been sunk a depth of 73 feet without hitting adequate water at diversion No. 2. The depth is too great for proposed design. The bottom 26 feet have been abandoned and a horizontal drift has been started.

Approximately $2500 have been spent on the project.

The nature, extent and estimated cost of construction remaining to be done to complete the work in accordance with the Application follows: (Describe with same details as required last above.)

It is necessary to complete the horizontal tunnels, pour 27 yards of concrete, lay another 1500 feet of 4" pipe, build a reservoir and install a pump. It is estimated that another $15,000 will be spent on the project. It is also essential that monument employment and public attendance return to normal before full beneficial use can be made.

(OVER)

Request is made for reinstatement and extension of time for filing
(Strike words not needed)
proof from **December 25,** , 19 **42** , to **December 25** , 19 **55** . Reasons why extensions should be granted are: (Give reasons why the work could not be completed and the water put to beneficial use within the time heretofore allowed and why conditions now will permit the completion of the works and filing of proof within the time requested. Be specific in statement.)

Above 13 year extension is requested to provide 2 or 3 years after close of war, and may be reduced accordingly when peace is restored.

See accompanying drawings NM-DIN-5307A and NM-DIN-6977.

Diversion No. 1 has been completed to provide limited, temporary supply which is adequate for reduced war time demand. Development of Diversion No. 2 was necessarily slow until May 1941, due to congested working quarters, care needed not to damage flow in water bearing stratum and difficulty in finding the water (see first attempt on 5307A where water was found to be too low for proper use). Since May 1941, first for defense and later for war, the United States has had to suspend all but the most essential pacific developments and impound their appropriations to provide the maximum of immediate cash for war activities.

The completion of this project is scheduled as a part of the post war stabilization program. The need for the extra water is so imperative under normal monument operation that resumption of activities is assured as soon as labor returns, the materials can be fabricated or their priorities are dropped, and funds are restored.

Affiant upon oath states that he or the owner of the Application, whom he represents, has a bona fide intention and the financial ability to complete the works and to apply the water to beneficial use as provided in the Application, within the period of extension requested. A filing fee of $1.00 is tendered herewith.

THE UNITED STATES OF AMERICA
By George W. Fry
Applicant
Acting **Supt., Rocky Mountain National Park.**
(If a corporation, specify the title of the officer making the affidavit and affix corporate seal)

Subscribed and sworn to before me this 2nd day of December 19 42.

Wayne H. Hackett
United States ~~Notary Public~~ Commissioner,
Rocky Mountain National Park.

NOT TO BE FILLED IN BY APPLICANT

Application No._____ Request due_____Recd._____
Applicant_____ Filing fee $1.00 Recd._____by____
Source_____ Receipt No._____
14 year period ends_____

Request for extension approved / rejected ; time for submitting proof is hereby extended from_____to and including_____

_____ _____
Date STATE ENGINEER

COPY

Form L 19 500 6-2. .1 The Times

THE STATE OF UTAH

OFFICE OF STATE ENGINEER
SALT LAKE CITY

December 1, 1942

EXTENSION GRANTED

Mr. U. S. National Park Service
Water Rights Section
601 Sheldon Building
San Francisco, Calif.

Dear Sir: REL: EXT. GRANTED APPLICATION NO. 13209.

This will acknowledge receipt of your request of Nov. 27, 1942, for Extension of Time in which to submit Proof of Appropriation contemplated by Application No. 13209 , together with filing fee of $1.00.

The matter has been considered and the time for submitting proof has been extended from December 25, 1942, to February 5, 1943, inclusive.

Yours very truly,

/s/ Ed. H. Watson

ADDRESS ALL COMMUNICATIONS TO:

STATE ENGINEER
403 STATE CAPITOL
SALT LAKE CITY, UTAH

BA

Original to Supt., Rocky Mt
Copies to Director
Region Two
Custodian Glacier
12/14/42

12-01-1942: proof due as contemplated by application 13209

C O P Y

Form L21 1000 6-24-41 The Times

THE STATE OF UTAH

OFFICE OF STATE ENGINEER
SALT LAKE CITY

December 1, 1942.

P R O O F D U E

Mr. U.S.National Park Service
Water Rights Section
601 Sheldon Building
San Francisco, Calif.

Dear Sir: REL: APPLICATION NO. 13209

Proof as contemplated by Application No. 13209 will be due February 5, 1943. Such proof, together with maps, profiles and drawings and the statutory filing fees, must be received in this office on or before that date. "Failure to make proof of appropriation or proof of change of the water on or before the date set therefor, shall cause the Application to lapse." (Section 100-3-17, Revised Statutes of Utah, 1933, as amended by Chapter 130, Laws of Utah, 1937). Blank forms upon which proof must be submitted and a copy of the Rules and Regulations will be sent upon request. Upon receipt of the proof it will receive an office examination after which a field inspection will follow.

An extension of time for filing proof will be granted only upon the filing of a written request for extension made in affidavit form, showing diligence or a reasonable cause for delay and containing the following information:

1. Whether or not actual construction work was begun within 6 months of the date of approval of Application and prosecuted until this time with diligence.

2. Amount of work done to date and approximate cost.

3. Amount of work remaining to be done and its estimated cost.

4. Reason for extension, and time desired.

Filing fee of $1.00 must accompany each request.

Yours very truly,

/s/ Ed. H. Watson

ADDRESS ALL COMMUNICATIONS TO:
BA
enc.: fl-25
(REGISTER)

STATE ENGINEER
403 STATE CAPITOL
SALT LAKE CITY, UTAH

Extra

C O P Y

THE STATE OF UTAH

OFFICE OF STATE ENGINEER
SALT LAKE CITY

ED. H. WATSON
State Engineer

December 1, 1942

Mr. A. van V. Dunn
Hydraulic Engineer
Water Rights Section
National Park Service
Department of the Interior
601 Sheldon Building
San Francisco, Calif.

re: Application No. 13209

Dear Sir:

I have your letter of November 27, 1942, in which you state that you are intending to request an extension of time on application #13209 to 1955, although you say that you intend to complete the project and file proof within two or three years after the war.

It is contrary to the policy of this office to grant extensions exceeding five years each, and I therefore suggest that you revise your form of request for extension, if you have already prepared it. Under separate cover, I am mailing you fifteen copies of our form of request for extension.

Our files indicate that no formal notice of proof due was sent on application #13209. I have therefore extended the time for filing proof to and including February 5, 1943, and am enclosing the regular proof due notice.

Very truly yours,

/s/ Ed. H. Watson

Ed. H. Watson,
State Engineer.

EJS/ba
fL-19;
encl.:fl-21; fl-25.
Register.

11-27-1942: letter to utah state engineer regarding reference is made with regard to extension of time

C O P Y

601 Sheldon Building

November 27, 1942.

State Engineer,

Salt Lake City, Utah.

Dear Sir:

Reference is made to your letter of November 18 with regard to extension of time in which to complete water systems under Applications 13209, 13619, and 14060.

Since these must be signed by the various Superintendents in the forms that you use, they will be submitted separately. In drawing up the one for Application 13209, the only one needing immediate attention, we have requested an extension of time to 1955, or 13 of the allowable 14 years. We should like to explain, however, that we do not expect to use all of that time unless the war is that long. The object is merely to carry the project in a suspended status until 2 or 3 years after the war without having to make requests for further extensions.

In all formal applications of this type we need copies for five offices. You sent only three copies of form L25 2M 9-42. Therefore, please send us twelve more copies of the form and advise us if there is any charge.

Yours very truly,

A. van V. Dunn,
Hydraulic Engineer.

cc: Director.
Regional Director, Region Two.
Regional Director, Region Three.
Supt., Rocky Mt. Nat. Park.
Supt., Zion Nat. Park.
Supt., S.W.Nat. Mons.

Form L18 1M 6-12-40 Paragon

C
O
P
Y

T. H. Humpherys
State Engineer

THE STATE OF UTAH
Office of State Engineer
SALT LAKE CITY

January 6, 1941

U. S. Department of Interior
National Park Service
Estes Park, Colorado

Dear Sir: REL: APPROVED APPLICATION NO. 13209

Enclosed herewith find (1) Application No. 13209 which has been approved by me and (2) receipt for $2.50 paid by you as approval fee. The approved Application is your authority to proceed with actual construction work which, under Sections 100-3-10 and 100-3-12, Revised Statutes of Utah, 1933 as amended, must be begun within six months of the approval date, and diligently prosecuted to completion, the water being put to beneficial use and proof of appropriation made to State Engineer on or before December 25, 1942.

Failure on your part to comply with these requirements may result in forfeiture of your Application

Yours very truly

/s/ T. H. HUMPHERYS
State Engineer

Address all communications to:
403 State Capitol
Salt Lake City, Utah

mct
Enc. Approved Application & receipt

00-00-0000: proof of publication

PROOF OF PUBLICATION

Dinosaur Deeds

STATE OF UTAH,
County of Uintah } ss.

I, Mable A Goodrich, being duly sworn, depose and say, that I am the Business Manager of **The Vernal Express**, a weekly newspaper of general circulation, published once each week at Vernal, Utah, that the notice attached hereto was published in said newspaper for 5 consecutive weeks, the first publication having been made on the 18 day of April, 1940 and the last on the 16 day of May, 1940, that said notice was published in the regular and entire issue of every number of the paper during the period and times of publication, and the same was published in the newspaper proper and not in a supplement

By Mable A Goodrich, Manager.

Subscribed and sworn to before me, this 16 day of May, A. D. 1940

Notary Public Residence, **Vernal, Utah.**

My Commission expires

NOTICE TO WATER USERS

The U. S. Dinosaur National Monument, Jensen, Utah, has filed Application No. 13209 to appropriate 0.02 sec. ft. of water (9 g. p. m.) from a spring area in Uintah county, described as follows: Beginning at a point N. 23 deg. 39 min East 2729.45 ft from the S¼ cor. Sec. 26 Twp 4 S., R 23 E., SLB & M and running th N 4 deg 43 min W 150 ft S 85 deg 17 min W 350 ft S 4 deg 43 min E 200 ft N 85 deg 17 min E 350 ft and N 4 deg 43 min W 50 ft to beginning. The water will be collected during the entire year at a point N 28 deg 10 min W 2814 ft from said S¼ cor Sec. 26, conveyed by gravity and pumping and used for domestic purposes at the Dinosaur National Monument.

Protests resisting the granting of this Application must be in affidavit form with extra copy and filed with T. H. Humpherys, State Engineer, 403 State Capitol, Salt Lake City, with a fee of $1 on or before June 15, 1940.

T. H. HUMPHERYS, state engineer
First publication date, April 18th; Last publication, May 16, 1940.

Form P-b—4-10-38—1M

Application No. 13209

Application to Appropriate Water for Domestic and Municipal Purposes
STATE OF UTAH

Do not fill out this blank until you have read carefully and thoroughly understand the Rules and Regulations on the back hereof and all the notes in the body of it.

For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, for domestic and municipal purposes, Application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of the Laws of Utah.

NOTE—The information given in the following blanks should be free from explanatory matter, but when necessary a complete supplementary statement should be made on the following page under the heading "Explanatory."

1. *The name of the applicant is* The United States of America
2. *The post-office address of the applicant is* Dinosaur National Monument, Jensen, Utah,
3. *The flow of water to be appropriated, in second-feet, is* c/o Coordinating Superintendent, Rocky Mountain National Park, Estes Park, Colorado. 0.02
4. *The quantity of water to be appropriated, in acre-feet, is* -- (See note on following page)
5. *The water is to be used each year from* January 1 (Month) (Day) *to* December 31 (Month) (Day) *incl.*
6. *The water is to be stored each year from* -- -- (Month) (Day) *to* -- -- (Month) (Day) *incl.*
7. *The drainage area to which the direct source of supply belongs is* Green River (Leave blank)
8. *The direct source of supply is*† a spring~~/ and underground water~~ tributary to Green River (Name of stream or other source)

which is tributary to....., *tributary to* .....

†NOTE—Where water is to be diverted from a well or a tunnel, the source should be designated as "Underground Water" in the first space and the remaining spaces should be left blank. If the source is a stream, a spring, a spring area, or a drain, so indicate in the first space, giving its name, if named, and in the remaining spaces, designate the stream channels to which it is tributary, **even though the water may sink, evaporate, or be diverted before reaching said channels.** If water from a spring flows in a natural surface channel before being diverted, the direct source should be designated as a stream and not a spring.

9. *The* ~~point of diversion from stream, spring~~, *spring area,* ~~drain, well (flowing or pump), tunnel~~ (Strike words not needed) *is in* Uintah *county, situated at a point** N 28 10' W 2814 ft. from ~~the spring whence the~~ SE corner of Section 26, T 4 S, R 25 E, Salt Lake Meridian. ~~Course & dist. to B. C. 2946 feet.~~

*NOTE—The point of diversion must be located definitely by course and distance or by rectangular distances with reference to some United States land corner or United States mineral monument, if within a distance of six miles of either, or if a greater distance, to some prominent and permanent natural object. (Also see note at top of following page.)

No Application will be received in which the point of diversion is not described definitely. Any change made in this description after Application is received and before approved will bring down the priority of Application to the date when the amendment is made of record in the State Engineer's office.

10. *The diverting and carrying works will consist of* ~~a small~~ tunnel type ~~infiltration~~ gallery collecting ~~pump at Diversion Point~~, and ~~6~~ pipe from ~~pump~~ to place of use. A pump and distribution reservoir will serve proposed museum and provide fire protection
11. *The cross section of the diverting channel will be* ~~square~~ O (Strike out ones not needed)
12. *The diverting works and diverting channel will be constructed of* ~~earth and~~, iron, concrete. (Strike out words not needed)
13. *The length of the diverting channel, exclusive of laterals, will be* ~~225~~ 1600 *feet*
14. *The top width of the diverting channel will be (if a ditch)* -- *feet*
15. *The bottom width of the diverting channel will be (if a ditch)* -- *feet*
16. *The depth of water in the channel will be (if a ditch)* -- *feet*
17. *The width of the diverting channel will be (if a flume)* -- *feet*
18. *The depth of water in the diverting channel will be (if a flume)* -- *feet*
19. *The diameter of the diverting channel will be (if a pipe)* ~~8~~ 4 *inches*
20. *The grade of the diverting channel will be* (control) 20 *feet per thousand*

EXPLANATORY

NOTE—Paragraph 4 on page 1 must not be used except when storage is contemplated; in such case Paragraph 5 should indicate the time in each year during which the water will be released and used. The lands to be inundated by the reservoir must be described in the space below this note as nearly as may be and by government subdivisions if upon surveyed land, and the area of the reservoir when at full stage should be given in acres.

If the reservoir is located on the channel of the source from which the water is to be appropriated, it should be so stated in the space below, and—

1. The location of the impounding dam should be described in Paragraph 9.
2. The point where the released storage will be rediverted from the natural stream should be described below in accordance with the note under Paragraph 9.

When water is not stored in the natural channel of the source from which it is to be appropriated, it should be so stated in the space below, and—

1. The point of diversion from the supplying source should be described in Paragraph 9.
2. The center of the impounding dam and the point where the released storage will be rediverted from a natural channel should be described below in accordance with the note under Paragraph 9.

In all cases Paragraphs 10 to 20, incl., should describe the entire diverting works, exclusive of natural channels and laterals, even if already constructed in whole or in part.

If Application is made for the water of a number of springs, or other sources collected at a common point, said point should be described as the point of diversion in Paragraph 9, and the point of diversion from each source should also be described below, in accordance with the note in Paragraph 9. The quantity of water sought from each source should be indicated below, the total equaling the quantity specified in Paragraphs 3 or 4. Where the source of supply is in reality a spring area, the point of diversion is the point where the water is collected; in such case the exterior boundary of the spring area must be described below by metes and bounds and located with reference to a point as outlined by the note under Paragraph 9.

The following additional facts are set forth in order to define more clearly the full purpose of the proposed appropriation:

at a spring N 24° 38' W 2746 ft. from said S¼ corner Section 26

The diversion, by temporary 1-inch pipe, has been in use for more than six years to provide domestic and sanitary facilities for the custodian, a crew of archaeological assistants and the visiting public in the SW¼ of said Section 26, SE¼ of Section 27, and NW¼ Section 35 of same township and range lying north of Green River.

An increase of 100% in monument attendance during the past three years has brought the peak water demand to full pipe capacity, and floods in the canyon have threatened to pollute the spring. The plans for a museum and other additional developments also require extensions and enlargement of the water system.

of diversion described in paragraph 9 preceding page

An exploratory shaft, on the rim of the canyon, has been sunk at a point ~~whence N 28°10' W 2814 feet from~~ said S¼ corner of Section 26 bears S 23°10' E 2814 feet. Running out this shaft has stopped the natural spring flow, proving identity of source of supply and indicating availability of larger quantity by further development of the layer of water-bearing sandstone by tunnels drifted from said exploratory shaft at point of diversion in Paragraph 9.

at existing 1-inch pipe diversion described first in this explanation

(approximately 0.02 second feet)

This application is, therefore, for 0.02 second feet of water at point of diversion and collection, at said exploratory shaft N 23°39' E 2729.45 from said S¼ corner Section 26, and for 30 acre-feet of water for storage in reservoir, from a spring area beginning at a point ~~N 65-17 E 50~~ feet from said point of diversion, thence N 4°43' W 150 feet, thence S 65°17' W 350 feet, thence S 4°43' E 200 feet, thence N 65°17' E 350 feet, and thence N 4°43' W 50 feet to the point of beginning; said area to be developed by tunnels or collecting galleries along the line of water-bearing rock, 6.5 ft. high, 6 feet wide, and totalling 100 feet in length to provide 30,000 gallon collecting capacity. A 4-inch GI pipe, from said exploratory shaft, and 775 feet long, will provide gravity supply to main place of use to south. A pump (30 gpm capacity) will deliver part of the water to concrete reservoir of 20,000 gallon capacity near proposed museum by 800 feet of 4-inch GI lateral serving also for fire protection distribution.

The water is used for domestic purposes in the residences and offices of the custodian and other permanent employees, and in camps of construction, maintenance and archaeological crews; for the normal purposes in machine shops, garages and a blacksmith shop; for the sanitary facilities in public comfort stations; and for fire protection. Any limited picnicking, restaurant facilities, or camping will be secondary to preceding operating and administrative needs which are expected to require total available water supply.

proper officer. If a corporation, the affidavit below need not be filled in. If there are more than one applicant, a power of attorney, authorizing one to act for all should accompany the Application.

STATE OF UTAH, }
County of..... } ss.

Personally appeared before me, a notary public for the State of Utah, the above applicant who, on oath, declared that he is a citizen of the United States.

My commission expires
(Seal)

.....
Notary Public.

00-00-0000: application to appropriate water for domestic and municipal purposes state engineer's endorsements

(This page is not to be filled in by applicant)

State Engineer's Endorsements

9 A.M.

1. Jan. 2, 1940 *Application received* ~~over counter~~ *by mail* *in State Engineer's office by* W.B.N.
2. ..... *Priority of Application brought down to, on account of* .....
Jan. 5, 1940 Voucher signed and returned - $2.50 W. N. W.
3. Jan. 19, 1940 *Fee for filing Application, $* ....., *received by* E.R.B. Rec. # 595
4. Jan. 10, 1940 *Application copied in book* D-11, *page* 310, *and indexed by* J.McC.
5. Feb. 23, 1940 *Application platted by* J.W.F.
6. Jan. 15, 1940 *Application examined by* J.W.F.
7. Jan. 15, 1940 *Application returned, with letter, to* D. H. Canfield *for correction*
8. Feb. 23, 1940 *Corrected Application resubmitted* ~~over counter~~ *by mail* *to State Engineer's office.*
9. Feb. 26, 1940 *Fee for publishing notice requested.*
10. April 4, 1940 *Fee for publishing notice, $* 15.00, *received by* E.R.B. Rec. # 712
11. Feb. 23, 1940 *Application approved for advertisement by* J.W.F. T.H.H.
12. April 10, 1940 *Notice to water users prepared by* J.W.F.
13. April 18, 1940 *Publication began; was completed* May 16, 1940
Notice published in Vernal Express
14. April 20, 1940 *Proof slips checked by* JWF - VN
15. ..... *Application protested by* .....
16. Nov. 23, 1940 *Application designated for* *approval* ~~*rejection*~~ *by* JWF THH
17. Nov. 23, 1940 *Fee for approving Application requested*
Signed Voucher returned, Dec. 2, 1940 ERB
18. Jan. 2, 1941 *Fee for approving Application, $2.50, received by* ERB Record # 4242
19. January 6, 1941 *Application proofread by* MS & McT
20. January 6, 1941 *Application* *approved* ~~*rejected*~~ *and returned to applicant*

This Application is approved, subject to prior rights, if any, on the following conditions:

1. *Actual construction work shall begin within six months from date of approval.*
2. *Proof of Appropriation shall be submitted to the State Engineer's office by* December 25, 1942.
3. Subject to existing rights.

/s/ T. H. Humpherys
State Engineer.

21. ..... *Time for making Proof of Appropriation extended to* .....
22. ..... *Proof of Appropriation submitted.*
23. ..... *Fee for filing Proof of Appropriation, $1.00, received by* .....
24. ..... *Fee for filing maps, profiles and drawings, $5.00, received by* .....
25. ..... *Fee for issuing Certificate of Appropriation, $1.00, received by* .....
26. ..... *Certificate of Appropriation, No.* ....., *issued*

I hereby certify that the foregoing is a true copy of the Application by ..... to appropriate water and of the endorsements thereon as shown by the records of my office on the date given below.

Salt Lake City, Utah ....., 19.....

State Engineer.

Application No. 13209

NOTICE TO APPLICANT

The approval of this Application is not a Certificate of Appropriation. It is merely your authority to begin construction work, which must be commenced within six months from the date of approval of this Application and prosecuted diligently to completion. To secure a Certificate of Appropriation under this Application, Proof of Appropriation must be submitted within the time limit allowed by the State Engineer. The amount of water for which Certificate will be issued will depend upon the amount of water actually put to a beneficial use, not to exceed, however, the amount of water specified in this Application. Proof of Appropriation must be made in accordance with the requirements of the law. For further information write the State Engineer.

(Not to be filled in by applicant.)

No. 13209

APPLICATION

OF

United States of America

TO

APPROPRIATE WATER

FROM

Spgs. & Underground Water

IN

Uintah County

FOR

DOMESTIC AND MUNICIPAL PURPOSES

Rules and Regulations

All waters in this state, whether above or under the ground, are the property of the public, subject to all existing rights to the use thereof. No appropriation of the unappropriated public water may be made and no rights to the use thereof shall be recognized except Application for such appropriation first be made to the State Engineer.

The Application must be signed by the applicant at the bottom of page 2 and the affidavit relating to citizenship, acknowledged before a Notary Public before the Application be received by the State Engineer.

An Application shall not be made for more than one purpose, except where the secondary purpose is a necessary incident to the primary one; as for instance, an Application for irrigation purposes may specify domestic purposes as a necessary incident.

An Application made to appropriate water for use in a single system with one or more points of diversion or sources of supply, or both, whether the water be commingled or not, may be accepted if made by one person or by a corporation, if and when the points of diversion be in close proximity or located in contiguous sections by government survey; provided, however, that the quantity of water sought, also the section corner, be given for each point of diversion.

In case a material error is made in the description of the point of diversion, or in case any error is made the correction of which would enlarge the rights sought in an Application after its receipt in the State Engineer's office, then such error may be corrected, but the priority date of the Application will be changed to the time when the corrected Application is resubmitted in the State Engineer's office; and, if the notice to water users has been published, the State Engineer may in his discretion cause a revised notice to be published at the expense of the applicant.

When there are two or more coapplicants the Application must be accompanied by a power of attorney, together with a fee of $1.00, authorizing one to act for all.

The applicant's permanent address should be given in Paragraph 2, and the State Engineer notified promptly of any change in address; otherwise applicant may lose rights initiated by Application by failing to receive notices sent from the State Engineer's office.

No Application or other paper pertaining to an Application will be marked received unless accompanied with the required filing fee.

Applications accepted and numbered by the State Engineer, when returned to applicant for corrections or additions, must be amended with red ink. Erasures must not be made, but any matter may be eliminated by running a red line through it. Corrected Applications must be resubmitted to the State Engineer's office, within sixty days from the date of State Engineer's letter returning Application for correction; otherwise the priority will be brought down to date corrected Application is resubmitted.

Applicants will be informed by the State Engineer's office when cost of publishing notice of Application is due, and must advance cost within sixty days after date of notice, otherwise Application will lapse.

Fees Required by Law Payable to State Engineer

For filing Application to appropriate 10 second-feet of water or less and additionally, $1.00 for each second-foot above 10.	$2.50
For filing Application to appropriate 500 acre-feet of water or less and additionally, 2 cents for each acre-foot above 500.	2.50
When the filing fee on any Application to appropriate water shall exceed $1,000.00, the balance of the fee in excess of $1,000.00 may, at the option of the applicant, be paid at the time the Proof of Appropriation is submitted.	
For approving and recording completed Application	2.50
For examining and filing written Proof of Appropriation	1.00
For examining and filing map, profile and drawings that are part of the Proof of Appropriation	5.00
For issuing Certificate of Appropriation	1.00
For filing and examining paper of assignment	1.00
For filing protests against the granting of Application or answers thereto	1.00
For filing an affidavit or any other paper	1.00

NOTE—Applicants will save time and expense by familiarizing themselves with the law before making Application.

DUPLICATE
(ORIGINAL)

CERTIFICATE OF APPROPRIATION OF WATER

STATE OF UTAH

CERTIFICATE NO. 150 B APPLICATION NO. 3977 PRIORITY NO. B1252

GREEN RIVER WATER DIVISION

Whereas, *It has been made to appear to the satisfaction of the undersigned, State Engineer of the State of Utah, that the appropriation of water from the* Green River *Water Division, made by* Earl Douglass *has been perfected in accordance with the application therefor, dated* May 1, *19* 11, *and recorded in the office of the State Engineer on page* 214 *in book* D-2 *of the record of applications to appropriate water;* **Wherefore**, *Be it known that I,* W. D. Beers, *State Engineer of the State of Utah, under and by authority and direction of the provisions of Chapter 108 of the Session Laws of Utah of 1905, as amended by Chapter 156 of the Session Laws of Utah, 1907, Chapter 62 of the Session Laws of Utah, 1909, and Chapters 3 and 103 of the Session Laws of Utah 1911, on "Water Rights and Irrigation," do hereby certify that the said* Earl Douglass *of* Jensen *in* Uintah *County, State of Utah, is entitled to the use of* One-hundredth(.01) *cubic feet of water per second, subject to the following restrictions, to-wit:*

The water is diverted from an unnamed spring in Uintah County at its point of issuance, which point bears north 8°30' west 2722.5 ft. distant from the northeast corner of Section 34, Township 4 South, Range 23 east, Salt Lake base and meridian. The diverting works consist of a ditch 400 ft. long, 1½ ft. wide on top, and 1 ft. wide in the bottom, having an effective depth of 6 in. A small reservoir and watering troughs are used for conserving the water. The water is used from January 1 to December 31, inclusive, of each year, for domestic and municipal purposes at the Carnagie Museum Quarry Camp. This use consumes all of the water.

The diverting works must be maintained in such condition as will prevent an unreasonable loss of water.

The date of the appropriation is May 10 *19*11, *and the priority number of the right is No.* B 1252

In Witness Whereof, *I have hereunto set my hand and affixed the seal of my office this* 22nd *day of* January *A. D. 19* 15.

/s/ W. D. Beers
STATE ENGINEER

I HEREBY CERTIFY this is the true copy of Certificate No. 737 as shown by the records of this office October 15, 1945. Salt Lake City, Utah

F. W. Cottrell, Chief Deputy

00-00-0000: certificate of appropriation of water

DOMESTIC AND MUNICIPAL.

Proof of Appropriation of Water.

State of Utah,)
) ss
County of)

I Earl Douglass *being first duly sworn, do hereby certify that I am the person, assignee or the* of *who or which made an application to appropriate water from* a spring *in* Green *river system or drainage area in* Uintah *County for domestic and municipal purposes, that said application is filed in the State Engineer's Office as No.* 3977 *; that I have completed the work necessary to accomplish the diversion and perfect the appropriation of water in accordance with the said application; that the following statement of facts is submitted in proof of the completion of said work and the appropriation of said water; that I made the said statement and that each and all of the items contained therein are true.*

In Witness Whereof, I have hereunto set my hand this 28 *day of* September *19*14

/s/ Earl Douglass
Signature of Appropriator.

Subscribed and sworn to before me this 28 *day of* September *19*14

My commission expires
Decmeber 18, 1917

/s/ Olive Glenn
Notary Public.

STATEMENT.

1. *Name of appropriator is* Earl Douglass
2. *Post-office address of appropriator is* Jensen, Utah
3. *The river system or drainage area to which the direct source of supply belongs is** Green River
4. *The direct source of supply is* a spring *in the above named river system (drainage area).*
5. *The "~~point of diversion~~" of water or "point of issuance" of spring is situated at a point* whence the NE Cor. Sec. 34, T4S, R23E, S.L.M. bears S 8°30' E, 2722.5 ft.
6. *The diverting works consist of* a concrete dam, a small reservoir, a ditch and troughs.
7. *Name of canal, ditch, pipe line, conduit, or other diverting channel (if named) is*
8. *The cross-section of the diverting channel will be* ~~\---/~~ ⊔ ~~⊖~~
   Strike out the ones not needed.
9. *The nature of the diverting channel is* earth, ~~wood~~, ~~iron~~, concrete
   Strike out the ones not needed.
10. *The length of the diverting channel is* 400 *feet*
11. *The top width of the diverting channel is (if a ditch)* 1½ *feet*
12. *The bottom width of the diverting channel is (if a ditch)* 1 *feet*
13. *The effective depth of the diverting channel is (if a ditch)* 0.5 *feet*
14. *The width of the diverting channel is (if a flume)* ---------- *feet*
15. *The effective depth of the diverting channel is (if a flume)* ---------- *feet*
16. *The diameter of the diverting channel is (if a pipe)* ---------- *feet*

* Leave blank

16a. *The water is to be used each year from* Jan. 1st. *to* Dec. 31st. *inclusive*

17. *The grade of the diverting channel is* 10 *feet per mile*

18. *Construction of works was commenced* April (see note) 1913

19. *Construction of works was completed* April 1911

20. *Works were first used to divert and carry water* April 1910

*21. *The flow of water appropriated is* 0.01 *cubic feet per second*

*22. *The quantity of water appropriated is* -------- *acre feet*

23. *The method employed in measuring the water was*

24. *Place where water is used* On garden ~~and for watering stock~~ camp at Carnagie Museum Quarry.

25. *Quantity of water consumed in cubic feet per second is* 0.01

26. *Quantity of water returned to natural channel of stream in cubic feet per second is* none

27. *Point where unconsumed water is returned to channel of natural stream is situated at a point*

NOTE—The "point of diversion" or the "point of issuance of spring" and the "point of return" (if any) must be located by course and distance or by rectangular distances with reference to some United States land corner or United States mineral monument, if within a distance of six miles of either, or if a greater distance to some prominent and permanent natural object.

GENERAL REMARKS.

The water was measured on September 27, 1914, with a bucket of known capacity. The flow of the spring at this time was 1½ gallons per minute.

/s/ Nile Hughel

During the summer the water is used to irrigate a small garden, and for domestic ~~use and stockwatering~~ purposes, by the employees of the Carnagie Museum Quarry and is used throughout the entire year for domestic ~~and stockwatering~~ purposes, by an average of 20 persons.

The construction work done to develope the spring was completed prior to the approval of this applicstion by the State Engineer, The date given in paragraph 18 was for some maintenence of the ditch.

*See Rules and Regulations on the back hereof.

State of Utah, }
County of Uintah } ss.

Nile Hughel and J. A. Kay having both been duly sworn, each for himself says that he is personally acquainted with the works constructed by Earl Douglass for the diversion and appropriation of water from a spring in the Green river system or drainage area in Uintah county for domestic and municipal purposes, that said works have been fully completed and used to the extent and in the manner particularly set forth in the foregoing statement of facts; that he has read said statement and that each and all of the items therein contained are true.

In Witness Whereof, each has hereunto set his hand this 13 day of November 1914

Nile Hughel
Signature of Witness

J. A. Kay
Signature of Witness.

Subscribed and sworn to before me this 13 day of November 1914

[SEAL]

Lynne Ashton
County Clerk ~~Notary Public.~~
By: L. Odekirk, Dep.

State Engineer's Endorsements

Dates	
May 10, 1911	Application received at State Engineer's office.
Mar. 8, 1913	Application approved and Sept. 30, 1914 allowed for completing works
	Time for completing works extended to 190
Sept. 30, 1914	Proof of appropriation received at State Engineer's office.
Oct. 30, 1914	Proof of appropriation examined and
Oct. 30, 1914	Proof of appropriation returned for correction by.
Nov. 18, 1914	Corrected proof of appropriation resubmitted.
Nov. 18, 1914	Corrected proof of appropriation examined and filed.
Sept. 30, 1914	Maps, profiles and drawings received at State Engineer's office.
Oct. 30, 1914	Maps, profiles and drawings examined and
Oct. 30, 1914	Maps, profiles and drawings returned for corrected by
Nov. 10, 1914	Corrected maps, profiles and drawings resubmitted.
Nov. 10, 1914	Corrected maps, profiles and drawings examined and filed
Jan 22, 1915	Certificate of appropriation issued (No. 150 B.)

State Engineer's Memoranda.

Sept. 30, 1914 Fee for examining and filing proof of appropriation received $1.00.

Sept. 30, 1914 Fee for examining and filing maps, profiles aud drawings received $5.00.

Jan 19, 1915 Fee for issuing certificate of appropriation received $1.00.

I hereby certify that the foregoing is a true copy of the Proof of Application made by Earl Douglass to appropriate water and of the endorsements thereon as shown by the records of my office on the date given below.

Salt Lake City, Utah October 2, 1945

F. W. Cottrell- Chief Deputy

Proof of Appropriation

OF

RELATIVE TO

APPLICATION NO.

TO

APPROPRIATE WATER

FROM

FOR

DOMESTIC & MUNICIPAL PURPOSES.

Rules and Regulations.

Section 44, Chapter 108, Session Laws of Utah, 1905, requires that maps, profiles, and drawings shall accompany the written proof of appropriation. They must be made in accordance with the rules and regulations published in pamphlet form by the State Engineer's office.

No proof of appropriation will be marked "received" until the fees have been paid and the maps, profiles, and drawings submitted.

Erasures must not be made on proofs of appropriation returned for correction, but any matter may be removed by running a red line through it, or the proof of appropriation made on another blank.

Proofs of appropriation returned for correction must be resubmitted within twenty days of the date of return endorsed hereon.

The engineer who prepares the maps, etc., should be one of the disinterested witnesses to inspect the work and make a sworn statement relative to the accuracy of the proof of the appropriation.

At least one measurement of the actual flow or quantity of water appropriated should be given in No. 21 or No. 22.

It is desirable that a series of such measurements be made and the results given under "General Remarks." The method of measurement should be given as by float, meter, weir, etc.

The manner of making water available for use for the purpose designated should be fully explained under the heading "General Remarks."

List of Fees Required by Law for State Treasury.

For examining and filing proof of appropriation	$1.00
For examining and filing maps, profiles and drawings	5.00
For issuing certificate of appropriation	1.00

COPIED BY.. NN
PROOF READ BY KK MAY

Form [illegible] 360 C

File No. 3977

Application to Appropriate Water for Domestic and Municipal Purposes

STATE OF UTAH

Do not fill out this blank until you have read carefully and thoroughly understand the "Rules and Regulations" on the back hereof and all the notes in the body of it.

Jensen, Utah, May 1 1911

For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, for domestic and municipal purposes, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of the Session Laws of Utah, 1919 to 1925.

NOTE—The information given in the following blanks should be free from explanatory matter, but when necessary a complete supplementary statement should be made on page 2 under the heading "Explanatory."

1. *The name of the applicant is* Earl Douglass
2. *The post-office address of the applicant is* Jensen, Utah
3. *The flow of water to be appropriated, in cubic feet per second, is* .01
4. *The quantity of water to be appropriated, in acre feet, is (see note under Explanatory)* ---
5. *The water is to be used each year from* Jan. 1 (Month) (Day) *to* Dec. 31st (Month) (Day)
6. *The water is to be stored each year from* ---------- (Month) (Day) *to* ---------- (Month) (Day)
7. *The river system or drainage area to which the direct source of supply belongs is** Green River
8. *The direct source of supply is* a spring (Name of Stream or Other Source) *in* Uinta County *County.*
9. *The* ~~point of diversion from stream~~ (Strike out one not needed) *is situated at a point* ~~165 rods (N. East of North)~~ N 8° 30' W 2722.5 feet from ~~point of issuance of spring~~ (~~not allowing for declination of needle~~) N.E. Corner of Sec. 34. T 4 S. R. 23 E.-~~U.S.M.~~-S.L.M.

NOTE—The "point of diversion" or "point of issuance of spring" must be located definitely by course and distance or by rectangular distances with reference to some United States land corner or United States mineral monument, if within a distance of six miles of either, or if a greater distance to some prominent and permanent natural object.
No application will be received in which the "point of diversion" or point of issuance of spring" is not described definitely. Any change made in this description after application is received and before approved will bring down the priority of application to the date when amended application is received.

10. *The diverting works will consist of* a dam making a small reservoir, a ditch, and a flume.
11. *The cross-section of the diverting channel will be* ~~⊥-_/-⊙-~~ (Strike out ones not needed)
12. *The nature of the diverting channel will be* earth, ~~wood, iron, concrete.~~ (Strike out ones not needed)
13. *The length of the diverting channel will be* 420 *feet*
14. *The top width of the diverting channel will be (if a ditch)* 1 *feet*
15. *The bottom width of the diverting channel will be (if a ditch)* 1/2 *feet*
16. *The depth of water in the channel will be (if a ditch)* 1/12 *feet*
17. *The width of the diverting channel will be (if a flume)* ----- *feet*
18. *The depth of water in the diverting channel will be (if a flume)* ~~3/4~~ *feet*
19. *The diameter of the diverting channel will be (if a pipe)* ----- *inches*
20. *The grade of the diverting channel will be* 112 *feet per thousand*

*Leave blank.

Tributary to Green River, Tributary to _____

LCM

EXPLANATORY

NOTE—Never use Paragraph 4 on preceding page except when it is intended to store the water to be appropriated; in such case the volume of water to be stored should be given in acre feet in that space. The time during which the water is to be stored in the reservoir should be stated in Paragraph 6, and the time during which it is to be released and used should be set forth in Paragraph 5. The lands to be inundated by the reservoir must be described in the space below this note as nearly as may be and by government subdivisions if upon surveyed land. The area of the reservoir when at full stage should be given in acres in the same space. If the reservoir is located on a natural stream bed and the water is to be released from the reservoir into the natural channel it should be so stated in the space below, and the point where it will be rediverted from such stream should be described in Paragraph 9 and the center of the impounding dam of such reservoir should be described in the space below in accordance with note in Paragraph 9. The data given in Paragraphs 10 to 20, inclusive, should be relative to the works used to divert the water from the natural channel. All other works should be described in the space below this note except when the water is not stored in the natural channel of the stream from which it is to be appropriated; in such case the point of diversion is the place where the water is taken from the supplying source and should be described in Paragraph 9, the center of the impounding dam described in the space below, and Paragraphs 10 to 20, inclusive, should describe the diverting works. In case the application is made for the water from a number of springs, the point where the water is collected should be described as the point of diversion and the works below it described as the diverting works; those above it should be described as the collecting works in the space below. Each spring should also be described in the space below in accordance with note in Paragraph 9. Where the source of supply is in reality a spring area, the point of diversion is the point where the water will be collected.

The following additional facts are set forth in order to define more clearly the full purpose of the proposed appropriation:

The purpose of the appropriation is to secure water for household purposes for stock for irrigating garden & c. The Carnegie Museum has; near the spring and wash, a quarry from which skeletons of extinct reptiles (Dinesaurs) are being taken. The quarry has been worked continuously since Sept. 2, 1909. A camp has been worked continuously since Sept. 2, 1909. A camp has been established, eleven peopl are living on the ground, also a team, cow, etc. One forth acre has been cleared and fenced and a garden planted.

There is also building stone on the ground and it is proposed to patent the land.

This spring is in a ravine known as Douglass Gulch and is between Nealson Gulch on the east and Ainge Gulch on the west. It is about 1/2 mile north and slightly east of the Lone Tree on Green River.

/s/ arl Douglass
*Signature of Applicant.**

*If applicant is a corporation or other organization, signature must be in the name of such corporation or organization by its proper officer. If applicant is a corporation or other organization the affidavit below need not be filled in. If there are more than one applicant, a power of attorney authorizing one to act for all should accompany the application.

STATE OF UTAH, }
County of ____ } ss.

each being for himself duly sworn, deposes and says I am a citizen of the United States have declared my intention of becoming a citizen (Strike out one not needed)

of the United States on ____ at ____

Subscribed and sworn to before me this ____ day of ____ ,19__

Notary Public.

My commission expires ____

00-00-0000: application to appropriate water for domestic and municipal purposes state engineer's endorsements

(This page is not to be filled in by applicant)

State Engineer's Endorsements

Dates: 3:45 P.M.

1. May 10, 1911 *Application received in State Engineer's office*
2. *Priority of application brought down to, on account*
3. June 9, 1911 *Application examined*
4. June 9, 1911 *Application returned to* applicant *for following corrections:*
   Wrong blank used. See letter 6-9-11.
5. July 31, 1911 *Corrected application returned to State Engineer's office* by mail
6. Nov. 3, 1911 *Corrected application examined and* accepted
7. *Application rejected and returned to applicant for the reason*
8. Mar. 8, 1913 *Application approved and returned to applicant by mail.*

This application is approved on the following conditions:

1. *That actual construction work shall begin within six months.*
2. *That the appropriation shall be fully completed by* September 30, 1914
3.

/s/ Caleb Tanner
State Engineer.

State Engineer's Memoranda

Dates:

1. May 10, 1911 *Fee for filing application paid* $ 2.50
2. Dec. 14, 1911 *Cost of publishing notice deposited* $ 7.50
3. Jan. 26, 1912 *Publication began and was completed* Feb. 26, 1912
4. *Notice published in* Vernal Express
5. *Application protested by*
6. Feb. 24, 1913 *Fee for recording and approving application paid* $2.50.
7. *Time for making proof of appropriation extended to*
8. *Proof of appropriation submitted* Sept. 30, 1914
9. Jan. 19, 1915 *Fee for issuing certificate of appropriation paid* $1.00.
10. Jan. 22, 1915 *Certificate of appropriation, No.* 150 E. *, issued.*

I hereby certify that the foregoing is a true copy of the application made by Earl Douglass to appropriate water and of the endorsements thereon as shown by the records of my office on the date given below.

Salt Lake City, Utah, October 3, 1945, 19

F. W. COTTRELL
Chief Deputy

File No. 3977 *Recorded* November 13, 19 11

NOTICE TO APPLICANT

The approval of this application is not a certificate of appropriation. It is merely your authority to begin construction work, which must be commenced within six months from the date of approval of this application and prosecuted diligently to completion. To secure a certificate of appropriation under this application proof of appropriation must be submitted within the time limit allowed by the State Engineer. The amount of water for which certificate will be issued will depend upon the amount of water actually put to a beneficial use at the time proof of appropriation is submitted, the same, however, not to exceed the amount of water specified in this application. Proof of appropriation must be made in accordance with Sections 55 and 56, Chapter 67, Session Laws of Utah, 1919. For further information write the State Engineer.

(Not to be filled in by applicant)

No.....

APPLICATION OF

TO **APPROPRIATE WATER** FROM

IN

FOR **DOMESTIC & MUNICIPAL PURPOSES.**

Recorded in Book.....of Applications
to Appropriate Water, on pages
to.....

Rules and Regulations

The affidavit relating to the citizenship of the applicant, at the bottom of page 2, must be filled in and sworn to before a notary public before the application will be received.

Application returned to applicant for correction must be corrected with red ink. Erasures must not be made, but any matter may be eliminated by running a red line through it. All additions must be made with red ink.

Application returned to applicant for correction must be resubmitted to the State Engineer's office within sixty days from the date noted in Paragraph 4, under State Engineer's endorsements, or the priority determined by the original receiving date will be lost.

Applications resubmitted after expiration of sixty days allowed by law for correcting same will be treated as new applications in all respects. (See Section 45, Chapter 67, Session Laws of Utah, 1919.)

No application will be received which contemplates the appropriation of water from an artificial canal or channel.

Seepage and percolating water, or water confined in sloughs and artificial drains is not subject to appropriation through the State Engineer's office.

It is permissible to appropriate water from more than one source of supply provided the water from the source specified is taken to one place and used for one purpose. In this case the point of diversion from each source must be specified in accordance with note in Paragraph 9. Also the amount of water to be diverted from each source should be specified under "Explanatory" on page 2, if only approximately.

The applicant's permanent address should be given in Paragraph 2, and the State Engineer should be notified promptly of any change in address; otherwise applicant may lose rights initiated by application by failing to receive notices sent from the State Engineer's office.

Applicant should sign the application at the bottom of page 2.

No application or other paper pertaining to an application will be marked received unless accompanied with the required filing fee.

Applicants will be informed by this office when cost of publishing notice of application is due, and must advance cost within sixty days after so notified.

Requests for extensions of time for completion of appropriation will not be considered unless submitted on or before the date when proof is due, accompanied with sufficient affidavit and required fee.

When there are two or more co-applicants the application should be accompanied by a power of attorney authorizing one to act for all.

Fees Required by Law for State Treasury

For examining and filing applications to appropriate ten cubic feet of water per second or less	$2.50
For examining and filing applications to appropriate five hundred acre feet of water or less	2.50

For examining and filing applications to appropriate more than ten cubic feet of water per second a fee of $2.50 plus $1.00 for each cubic foot per second in excess of that flow.

For examining and filing applications to appropriate more than five hundred acre feet of water a fee of $2.50 plus 2 cents for each acre foot in excess of that quantity.

When the filing fee on any application to appropriate water shall exceed $1,000.00, the balance of the fee in excess of $1,000.00 may, at the option of the applicant, be paid at the time the proof of appropriation is submitted.

For approving and recording completed applications	2.50
For examining and filing written proof of appropriation	1.00
For examining and filing map, profile and drawings that are part of the proof of appropriation	5.00
For issuing certificate of appropriation	1.00

For filing and examining papers of assignment, $1.00; and in addition 50 cents for the first folio and 20 cents for each additional folio for recording.

For filing protests against the granting of applications	1.00
For filing an affidavit or any other paper	1.00

NOTE—Applicants will save time and expense by familiarizing themselves with the law before making applications.

COMED BY MAK

10-31-1945: tract record and valuation data of land to be acquired

Form NPS-L-3

UNITED STATES DEPARTMENT OF TH NTERIOR
NATIONAL PARK SERVICE

TRACT RECORD AND VALUATION DATA OF LAND TO BE ACQUIRED

Alien WR 1
Tract No. _____

State Utah

County Uintah

Deed No. _____

Civil Subdivision _____ Dinosaur _____ West of Quarry Headquarters
Name of Park of Park or Area — Section of Park or Area

RECORD OF OWNERSHIP

Conveyed to: (Name and address)	Date	Acres	Deed Book	Page	Remarks
Earl Douglass	5/10/11				From State of Utah
State Land Board	?				From Earl Douglass

CLASSIFICATION AND VALUE OF LAND

Classification	Tax Valuation Basis %					Appraisals		
	Area acres	Year	Value	Tax Rate	Total Tax	1	2	3
Appurtenant to tract No. 13								
Total								

KIND AND VALUE OF IMPROVEMENTS

Water Right Application 3977, Permit 3977, Certificate 1508							
Total							

RECORD OF APPRAISALS

	Name and address of Appraiser	Title	Date
1	A. van V. Dunn	Chief, Water Rights Division	Oct. 31, 1945
2			
3			

If tract is required in Project Construction Program (PCP) give reference number _____

Will additional personnel. development and/or equipment be needed to administer this tract: No If so, state briefly: _____

Form NPS-L-3
Page 2

Legal Description: Water Right Application 3977, Permit 3977, Certificate 150B for diversion and use of 0.01 sec.ft. of an unnamed spring at point whence NE corner Section 34, T. 4 S., R. 23 E., S.L.M., bears S 8-30 E. 2722.5 feet, for domestic purposes.

Liens: Subject to lapse if not used for 5 years.

Description of existing or outstanding rights, rights of way or reservations, if any:

Should they be acquired with the land (____) or are they administratively acceptable:

Description of Improvements: Concrete dam, small reservoir, a ditch and troughs.

Special Features:

Justification for acquisition: Additional water supply for Quarry Headquarters.

Priority in purchase program:

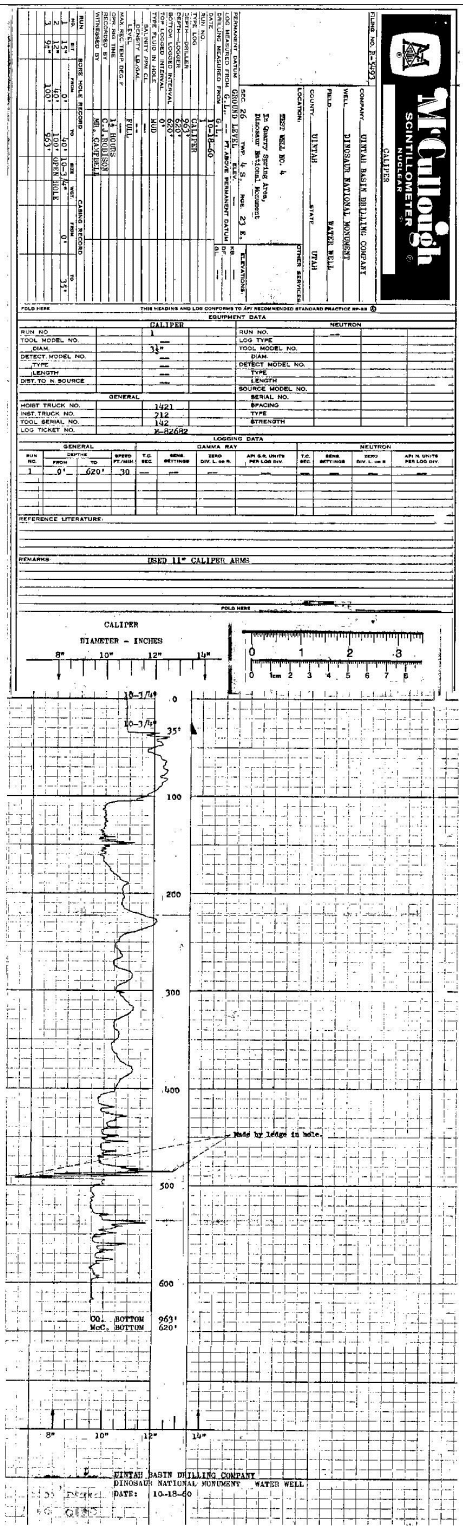
Remarks: Purposes of this Service will be served equally well if the right lapses to make the water available for new appropriation.
Cost of new appropriation would be approximately $250. The value of existing right to owner should be between $100 and $500 in terms of land productivity, say average of $300.

If space is insufficient for any particular subject attach additional sheet and mark "See attached sheet for continuation"

25348

Supporting Hydro Data

10-18-1960: well log



SCHLUMBERGER WELL SURVEYING CORPORATION

Directional Log

COUNTY UINTAH
FIELD or LOCATION SEC. 26-4S-23E
WELL DINOSAUR NATIONAL MONUMENT RESEARCH
COMPANY U. S. DEPARTMENT OF INTERIOR

COMPANY U. S. DEPARTMENT OF INTERIOR
WELL DINOSAUR NATIONAL MONUMENT RESEARCH
FIELD
LOCATION SEC. 26-4S-23E NE SW
COUNTY UINTAH
STATE UTAH

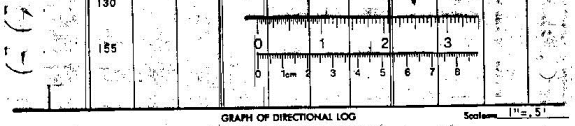
Location of Well
Quarry Area
Elevation D.F. K.B. or G.L.
FILING No.

Run No. ONE
First Reading 155
Last Reading 40
Set Measured Cas. Diameter 6 5/8
Cas. Driller 6 5/8
Depth Reached 155
Depth Driller 155
Mud Name WATER
Density
Viscosity
Mud Nat. Temp. °F
Bit Size 10"
Depth Intervals 15/30

P.C. No. 209
Opr. Rig Time 1 HR.
Truck No. 1
Recorded By LARRY HILL
Witnessed By JEFFREY

REMARKS TRUE BEARINGS DIFFICULT TO DETERMINE DUE TO SMALL DRIFT ANGLES

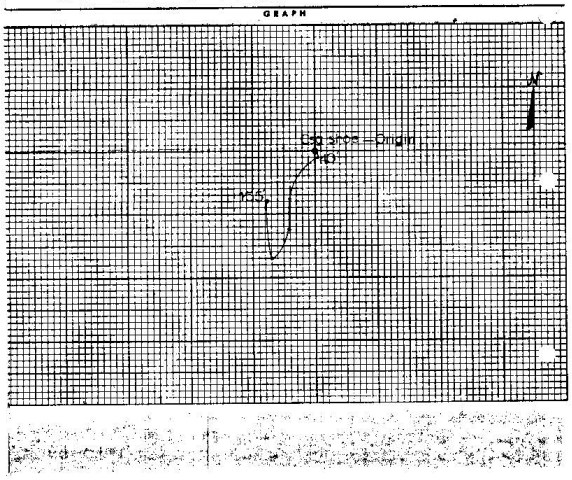
Depth	Drift Angle	DEFLECTION True Bearing	Horizontal Footage	Vertical Footage	LATITUDE N	LATITUDE S	DEPARTURE E	DEPARTURE W	COORDINATES N	COORDINATES S	COORDINATES E	COORDINATES W
40	0-15'	S24°E	.06	13		.05	.02			.05	.02	
70	0-45'	S36°W	.39	30		.32		.23		.37		.21
100	0-30'	S	.26	30		.26				.63		.21
130	0-30'	S32°W	.26	30		.22		.14		.85		.35
155	1°-45'	N100°W	.46	15	.45			.08		.40		.38



GRAPH OF DIRECTIONAL LOG
Scale cm 1"=.5'
ALL DIRECTIONS ARE FROM TRUE NORTH

	DEPTH	
Position of bottom of hole at	155	.40 FEET SOUTH AND .38 FEET WEST OR
Position of bottom of hole at		.55' SOUTH 44 DEGREES WEST FROM BOTTOM
Position of bottom of hole at		OF CASING
Position of bottom of hole at		

GRAPH



02-27-1959: well pump data chart

FORM 2-19-59
REGION TWO OFFICE

WELL PUMP DATA CHART

Date February 27, 1959 Sheet 1 of 1

PARK OR MONUMENT Dinosaur National Monument

NAME OF SUPPLY, and LOCATION by 40 ACRE DIVISION of Sec., Twp. & Rge.	PUMP UNIT									PUMP	POWER
	MAKE	SERIAL NUMBER	TYPE - PISTON TURBINE, ETC.	CAPACITY - GPM DESIGN	CAPACITY - GPM ACTUAL	HEAD - FEET DESIGN	HEAD - FEET ACTUAL	DIA.-INCHES INTAKE	DIA.-INCHES OUTLET	KIND ELEC-GAS	HP	Operating RPM
Quarry Area Water Supply - NW¼, Sec. 35, T4S, R23E	Pomona "Little Chief"	PV7095	KZVA-Turbine		50		410	3"	2½"	Elec.	7½	3450

Form 10-174 (Rev. 1/56)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

REPORT 7 SPL

COMPLETION REPORT OF CONSTRUCTION PROJECT

REGION	AREA	COUNTY	STATE
Two	Dinosaur National Monument	Uintah	Utah

PROJECT OR JOB TITLE: Water & Sewer Systems, To Visitor Center & Residential area
PCP NO.: U-3 & U-7

LOCATION IN AREA: Quarry Area
MASTER PLAN NO.:
BUILDING NO.:

WORKING DRAWING NO. AND TITLE: Water & Sewer Systems, Quarry Area - Dwg No. NM-DIN. 3110

APPROPRIATION TITLE AND SYMBOL: 14x1035
ACCOUNT NO.: 332.5

CONTRACT NO.: 14-10-232-164
DATE WORK STARTED: 8/12/56
DATE WORK COMPLETED: 6/4/57

NAME OF CONTRACTOR: Ashton Bros. Inc.
ADDRESS: Vernal, Utah

COST ANALYSIS

CONSTRUCTION ITEMS	QTY.	UNIT COST IN PLACE	TOTAL COST IN PLACE
SEE ATTACHMENT			91,295.79
Facilitating Services (3/4 of 1%)			684.67
Other (Telephone tolls)			4.50
COSTS AGREE WITH FIELD FINANCE OFFICE RECORDS - 9/26/57 C. D. Van Kirk C. D. Van Kirk, Supervisory Accountant			
		TOTAL	91,984.96

SUMMARY OF EXPENDITURES

PERSONAL SERVICES	EQUIPMENT	MATERIALS AND SUPPLIES

OTHER: 4.50 Facilitating Services 684.67

CHANGE ORDERS

ORIGINAL CONTRACT AMOUNT	FIRST	SECOND	THIRD
70,348.69 (Por)	ADD $40.00	ADD $16,729.62	ADD $3,330.22
FINAL CONTRACT AMOUNT	**FOURTH**	**FIFTH**	**SIXTH**
91,295.79			

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

SUBMITTED BY (Name and title): R. Neil Grunigen
R. Neil Grunigen, Project Supervisor — DATE: Sept. 8, 1957

APPROVED BY (Name and title): Oscar T. Dick
Oscar T. Dick, Acting Superintendent — DATE: 9-9-57

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

U. S. GOVERNMENT PRINTING OFFICE: 1956—O-374085

WATER SYSTEM

Bid Item:

1.	1 each, developing well	$ 812.90 *
2.	15 1/3 hours pumping test @$6.50	101.20 *
3.	1 each, pump house @ $3,340.97	3,340.97
4.	1 each, 50,000-gallon steel reservoir installed in place @ $10,577.50	10,577.50
5.	2,150 lin. ft., 8-inch class 150 cast iron pipe @ $7.76	16,684.00
6.	1881 lin. ft., 6-inch class 150 cast iron pipe @ $5.74	10,796.94
7.	607 lin. ft., 2-inch galvanized steel pipe @ $1.23	746.61
8.	288 lin. ft., 1-inch galvanized steel pipe @ $1.02	293.76
9.	Not installed	------
10.	6-inch flanged gate valve w/gate box-4 each @ $94.36	377.44
11.	2-inch gate valves with gate box 2 each @ $50.00	100.00
12.	1-inch gate valves with gate box 6 each @ $27.14	162.84
13.	6-inch fire hydrants on 8 inch line 2 each @ $351.65	703.30
14.	6-inch fire hydrant on 6 inch line 2 each @ $338.82	677.64
15.	Concrete collar anchors, 12 each @ $143.00	1,716.00
16.	Insulated channel crossing and drain 1 each @ $791.38	791.38
17.	1 each, pressure reducing valve and box @ $1,154.65	1,154.65

Change Order No. 2

1.	Providing a dug well	1,718.05
2.	Developing the well	1,169.00
3.	5 hours, pumping test @ $7.50	37.50
4.	Construct pump house for an additional amount above the original amount of item 3 of the bid schedule for the Water System	1,427.03
5.	1,573 lin. ft., 6-inch class 250 cast iron pipe @ $6.93	10,900.89
6.	Install 6" x 6" x 2½" tee and valve, reducing valve with strainer and valve box	1,154.65

CHANGE ORDER NO. 3

1. Raise pumphouse, construct new foundation, etc. as specified in Change Order No. 3, Lump Sum	3,330.22

SEWER SYSTEM

1. 3,668 lin. ft., 6-inch dia. std. strength clay sewer tile @ $3.62	13,278.16
2. Reinforced concrete manholes- 14-each @ $299.35	3,210.90
3. Septic tank at Visitor Center, 1 each @ $1,529.41 plus $40.00 on Change Order No. 1	1,569.41
4. Septic tank and dosing tank at Residential Area - 1 each @ $1,830.00	1,830.00
5. Disposal field at Residential area 1 each @ $2,831.95	2,831.95
6. Concrete collar anchors- 5 each @ $143.00	715.00
Contract completed June 4, 1957	$92,209.89

* Bid items No. 1 and 2 (water system) were for exploring for water therefore the amount of $914.10 plus $6.90 facilitating services were charged against Region Two Office, Account 143.2

NARRATIVE STATEMENT

WATER AND SEWER SYSTEMS TO VISITOR CENTER AND RESIDENTIAL AREA SITES, QUARRY AREA, DINOSAUR NATIONAL MONUMENT.

Contract No. 14-10-232-164

The project was advertized on June 27, 1956 and bids opened in the office of the Superintendent at Vernal, Utah on July 18, 1956.

The contract was awarded to the low bidder, Ashton Bros. Inc., of Vernal, Utah. The first day of the contract period was established as August 12, 1956.

The work progressed very satisfactorily and the contractor concentrated on completing the work in the Residential Area first in-order that the contractor doing the road work could proceed and the roads not be disturbed to install the utilities.

The source of water for the system was to be a well, located above the "old utility area", which was drilled in 1951. Pump tests by the contractor on this well proved that there was insufficient water to do any good or justify installing the pump etc.

Since the above well would not furnish the necessary water for the system a new source was necessary. By rental of equipment a test well was dug adjacent to the Green River to determine if water would percolate through the soil to the well. Preliminary tests showed that sufficient water could be secured from this source and sheet 6 of the Contract Drawings, NM-DIN. 3110 was prepared and a change order negotiated with the contractor. The well was dug, developed and cased, complete to ground surface, when snow and freezing weather closed the project for the winter on December 8, 1956.

Work was resumed on the project on April 8, 1957 and the pump house, pump, controls, steel reservoir, balance of pipe etc were installed by May 16.

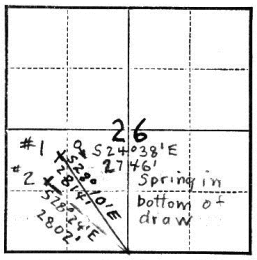
This was a year of unusual rainfall and high water in the river to which we attribute the settling of the pump house, which resulted in a break in the pipe line. It was necessary to raise the pump house, design and construct on entirely new foundation, repair the pipe etc.

The contractor completed all construction, tests, clean-up etc and requested final inspection and release on June 3. Final inspection and acceptance of the project was made by Superintendent Lombard and the writer on June 4, 1957.

9—255
(Jan. 1927)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

RECORD OF WELL # 1



Locate well on plat of section.

1. **Location:** State Utah County Uintah
Nearest P. O. Jensen, Utah Direction from P. O. NNE
Distance from P. O. 8 miles; SW ¼ sec. 26, T. 4 S, R. 23E of the Salt Lake Meridian
If in city, give street and number

2. **Owner:** Dinosaur National Monument U.S.D.I. National Park Service Address Jensen, Utah
Driller: National Park Service Address Jensen, Utah

3. **Situation:** Is well on upland, in valley, or on hillside? Hillside

4. **Elevation of top of well:** 5190 ft. above (Above or below) the level of mean sea level (Sea, depot, lake, or stream)

5. **Type of well:** dug (Dug, driven, bored, or drilled); kind of drilling rig used solid tool (Solid tool, jetting, rotary, etc.)

6. **Depth of well:** 73 ft.; year in which well was finished 1942
Does well enter rock? ; if so, at what depth? 39.5 ft.; kind of rock Sandstone

7. **Diameter:** At top 96 inches; at bottom 72 inches.

8. **Principal water bed:** Rock - Sandstone (Gravel, sand, clay, or rock. If rock, state kind)
Depth to principal water bed 39.5 ft. ft.; thickness of bed 7.5 ft.
If other water supplies were found, give depth to each None other encountered

9. **Casings:** Kind reinforced concrete; size 96"; length 39.5 ft.; between depths of 0 and 39.5 ft.
Kind Steel; size 8"; length 42 ft.; between depths of and ft.
Kind Steel; size 6"; length 65 ft.; between depths of and ft.
Packers (if any): Depth at which packers were used none; kind
Screen or **Strainer:** Was well finished with screen? no; kind of screen ;
length of screen ft.; diameter inches; size of openings

10. **Head:** Does well at present overflow without pumping? no; did it overflow when new? no ;
if flowing, give pressure lb. per sq. inch; or height water will rise in a pipe ft. above surface;
original pressure or head ; if not flowing, give water level in well one ft. below surface.

11. **Pump:** Is the well pumped? no; kind of pump ;
size or capacity of pump ; kind of power

12. **Yield:** Natural flow at present (if any) no gallons per minute; original flow no gallons per minute;
well has been pumped at less than 10 gallons per hour continuously for several hours;
quantity of water ordinarily obtained from well 0 gallons per day.

13. **Use:** For what purpose is the water used? -- (well abandoned)

14. **Quality of the water:** -- (Hard or soft, fresh or salty, etc.); is there an analysis? no

15. **Cost of well,** not including pump: $2,500 Temperature of water ° F.

Name of person filling blank* Gordon W. Robertson, Assistant Chief, Water Resources Branch
Date July 21, 1952 Address National Park Service, Washington 25, D. C.

On the back of this sheet give the record of the beds through which the well passes and any other facts not given above.

6—9642

*Data from Dwg. NM-DIN-5307A (NPS) and from correspondence files.

LOG OF WELL

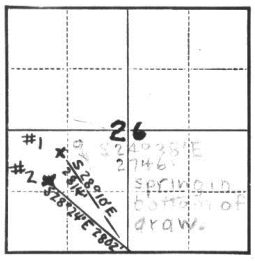
KIND OF ROCK OR OTHER MATERIAL (Give color and tell whether hard or soft)	DEPTH, IN FEET		THICKNESS, IN FEET	REMARKS (Especially information as to water found)
	From—	To—		
Clay and shale	0	39.5	39.5	
Very fine sandstone	39.5	73	33.5	Water bearing stratum

U. S. GOVERNMENT PRINTING OFFICE 6—9642

9–255
(Jan. 1927)

) STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

RECORD OF WELL #2



Locate well on plat of section.

1. **Location:** State Utah County Uinta
Nearest P. O. Jensen, Utah Direction from P. O. NNE
Distance from P. O. 8 miles; SW ¼ sec. 26, T. 4 S, R. 23E of the Salt Lake Meridian
If in city, give street and number

2. **Owner:** Dinosaur National Monument U.S.D.I. National Pake Service. Address Jensen, Utah.
Driller: Garnett Birchell Address Vernal, Utah

3. **Situation:** Is well on upland, in valley, or on hillside? Hillside

4. **Elevation of top of well:** Appr. 5160 ft. above (Above or below) the level of mean sea level (Sea, depot, lake, or stream)

5. **Type of well:** drilled (Dug, driven, bored, or drilled); kind of drilling rig used solid tool (Solid tool, jetting, rotary, etc.)

6. **Depth of well:** 165 ft.; year in which well was finished 1951
Does well enter rock? Yes; if so, at what depth? 41 ft. ft.; kind of rock Sandstone

7. **Diameter:** At top 8" cased inches; at bottom 6" uncased inches.

8. **Principal water bed:** Rock - Sandstone (Gravel, sand, clay, or rock. If rock, state kind)
Depth to principal water bed 150 ft.; thickness of bed 15 ft.
If other water supplies were found, give depth to each None other encountered

9. **Casings:** Kind Steel; size 8"; length 42 ft.; between depths of 1 foot above gnd. and 41' below gnd. ft.
Kind Steel; size 6"; length 65 ft.; between depths of 2' above gnd. and 63' below gnd. ft.
Kind ; size ; length ft.; between depths of and ft.
Packers (if any): Depth at which packers were used None; kind
Screen or Strainer: Was well finished with screen? No; kind of screen ;
length of screen ft.; diameter inches; size of openings

10. **Head:** Does well at present overflow without pumping? No; did it overflow when new? No;
if flowing, give pressure lb. per sq. inch; or height water will rise in a pipe ft. above surface;
original pressure or head ; if not flowing, give water level in well one ft. below surface.

11. **Pump:** Is the well pumped? Not yet; kind of pump ;
size or capacity of pump ; kind of power

12. **Yield:** Natural flow at present (if any) No gallons per minute; original flow No gallons per minute;
well has been ~~pumped~~ baled at approx. 10 gallons per minute continuously for 5 hours;
quantity of water ordinarily obtained from well gallons per day.

13. **Use:** For what purpose is the water used? Domestic

14. **Quality of the water:** no test yet made (Hard or soft, fresh or salty, etc.); is there an analysis?

15. **Cost of well,** not including pump: $ 1,332.69 Temperature of water ° F.

Name of person filling blank Richard T. Montgomery, Park Engr. R.M.N.P.
Date 1/29/52 Address Estes Park, Colorad.

6—9642

On the back of this sheet give the record of the beds through which the well passes and any other facts not given above.

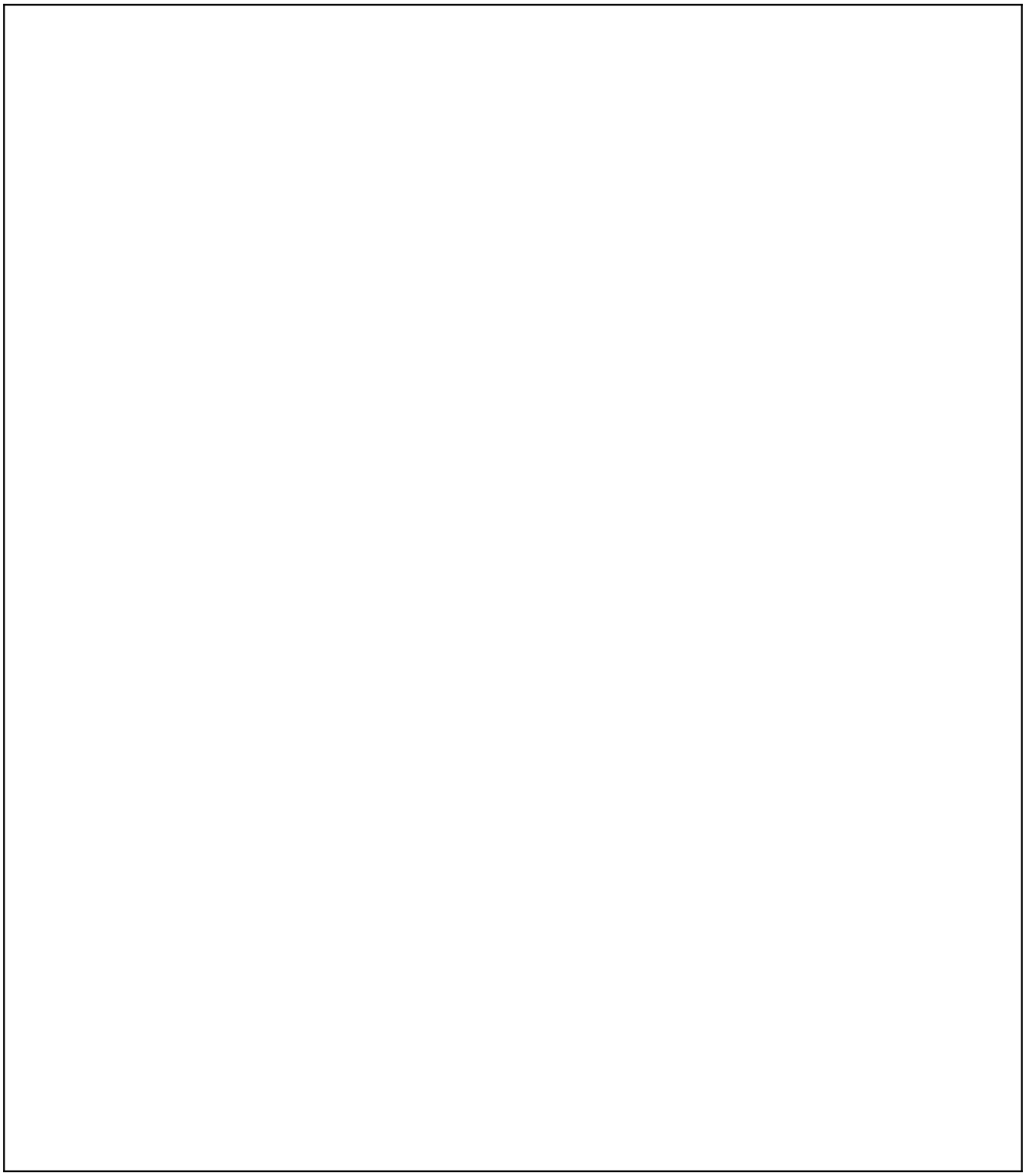
LOG OF WELL

KIND OF ROCK OR OTHER MATERIAL (Give color and tell whether hard or soft)	DEPTH, IN FEET		THICKNESS, IN FEET	REMARKS (Especially information as to water found)
	From—	To—		
Quick sand (Soil mantle)	0	20	20'	
Soft sand stone	20	58	38'	
Sand stone (Hard)	58	64	6'	
Sand stone (tight)	64	162	98'	
White water sand	162	165	3'	
Sand stone (hard)	165	168	3'	Streak of blue clay at 167'

U. S. GOVERNMENT PRINTING OFFICE 6—9642

Other Supporting Information

00-00-0000: memorandum to superintendent regarding water supply from well no. 4, quarry area



UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
Dinosaur National Monument
91 West Main, Vernal, Utah

IN REPLY REFER TO:
L54 (Feb 1 05031 Dino)

January 19, 1962

Rec'd 1/23/62

Reg. Director
Asst. Reg. Director
Chf. Div. of Admin.
~~Chf. Div. of Operations~~
Chf. Div. of Interp.
Chf. Rec. Res. Planning
Chf. Ranger Activities
Field Solicitor
Action Taken 4/4/62 Memo to Info
File

Memorandum

To: Regional Director, Region Two

From: Superintendent, Dinosaur

Subject: Chemical Water Analysis, Test Well No. 4, Quarry Water Supply, Dinosaur National Monument

As you requested in your memorandum of Sept. 8, 1961, a gallon sample of water from subject well was forwarded to Mr. Lynn M. Thatcher, Director, Division of Sanitation, Utah, for analysis. Attached is a photo copy of his report.

This sample was taken at the pump house at a reading of 71,500 gallons pumped from the new well and into the system. We find that the pump produces 55 GPM and that we had a low water cut off after pumping 30,000 gallons of water in one continuous pumping, as we drained and refilled the 50,000 gallons storage tank.

Earl M. Semingsen
Superintendent

In dupl.
w/attachment

C.C. MAILED TO C/R
BY.....DATE.....

01-23-1962: stamp of receival

RECEIVED
REGION TWO OFFICE

1962 JAN 23 AM 9:31

NATIONAL PARK SERVICE
OMAHA, NEBRASKA

11-23-1961: water sample for chemical analysis

PLEASE NOTE: Sample cannot be analysed until all blanks are filled in (See reverse side)

THE STATE OF UTAH
DEPARTMENT OF HEALTH
45 Ft. Douglas Blvd.
Salt Lake City 13, Utah

DO NOT WRITE HERE
Sample Received on 12/7/61
Analysis Authorized by
Howard L. Curtis

WATER SAMPLE FOR CHEMICAL ANALYSIS [X]
WATER SAMPLE FOR RADIOLOGIC ANALYSIS [ ]

SAMPLE COLLECTED FROM: (check one)

Stream [ ] Spring [ ] Well [X]

City or Town water distribution system [ ]

Other [ ] (describe) Dinosaur National Monument

EXACT DESCRIPTION OF SAMPLING POINT: (see note on reverse side) Well - Dinosaur National Monument Quarry (Well #4)

STATE ENGINEER'S APPLICATION OR CLAIM NO.

SUPPLY OWNED BY: Dinosaur National Monument

PRESENT USE OF SUPPLY: None

PROPOSED USE OF SUPPLY: Culinary

SAMPLE COLLECTED BY: Jeffery DATE: November 23, 1961

REPORT RESULTS TO: Dinosaur National Monument

Address: 91 West Main St., Vernal, Utah

DO NOT WRITE BELOW DOUBLE LINE

RESULTS OF ANALYSIS

Turbidity	1.5	Turbidity Units	Iron (total) as Fe	0.04	mg/l
Conductivity	460	micromhos/cm	Iron in filtered sample as Fe	0.01	mg/l
pH	7.9		Lead as Pb		mg/l
Total Dissolved Solids	283	mg/l	Magnesium as Mg	27	mg/l
Alkalinity(total) as $CaCO_3$	191	mg/l	Manganese as Mn	0.50	mg/l
Aluminum as Al		mg/l	Nitrate as NO_3	0.39	mg/l
Arsenic as As	0.00	mg/l	Phosphate as PO_4	0.00	mg/l
Barium as Ba		mg/l	Phenols as Phenol		mg/l
Bicarbonate as HCO_3	19.3	mg/l	Potassium as K	4.0	mg/l
Boron as B	0.00	mg/l	Selenium as Se		mg/l
Cadmium as Cd		mg/l	Silica as SiO_2	8.5	mg/l
Calcium as Ca	39	mg/l	Silver as Ag		mg/l
Carbonate as CO_3	1.0	mg/l	Sodium as Na	20	mg/l
Chloride as Cl	11	mg/l	Sulfate as SO_4	38	mg/l
Chromium(hexavalent) as Cr	0.00	mg/l	Surfactant as ABS		mg/l
Copper as Cu	0.00	mg/l	Zinc as Zn		mg/l
Cyanide as CN		mg/l	Suspended alpha		uuc/l
Fluoride as F	0.28	mg/l	Dissolved alpha		uuc/l
Hardness(total) as $CaCO_3$	208	mg/l	Suspended beta		uuc/l
Hydroxide as OH	0.01	mg/l	Dissolved beta		uuc/l

Form 113 2M 4-60

Examined .....
Recorded: B. C. ..... T. B. .....
Inspection Sheet .....
Copied .....

REPORT OF WELL DRILLER
STATE OF UTAH

Application No. .....
Claim No. .....
Coordinate No. .....

GENERAL STATEMENT: Report of well driller is hereby made and filed with the State Engineer, in accordance with the laws of Utah. (This report shall be filed with the State Engineer within 30 days after the completion or abandonment of the well. Failure to file such reports constitutes a misdemeanor.)

(1) WELL OWNER:
Name Dinosaur National Monument
Address 91 West Main, Vernal, Utah

(2) LOCATION OF WELL:
County Uintah Ground Water Basin (leave blank)
North 2446 feet, ~~East~~ West 1223 feet from 5¼ Corner ~~NWSE~~
of Section 26, T 4 ~~N~~ S, R 23 E SLBM (strike out words not needed) ~~W. USM~~

(3) NATURE OF WORK (check): New Well ☒
Replacement Well ☐ Deepening ☐ Repair ☐ Abandon ☐
If abandonment, describe material and procedure: .....

(4) NATURE OF USE (check):
Domestic ☒ Industrial ☐ Municipal ☐ Stockwater ☐
Irrigation ☒ Mining ☐ Other ☐ Test Well ☐

(5) TYPE OF CONSTRUCTION (check):
Rotary ☒ Dug ☐ Jetted ☐
Cable ☐ Driven ☐ Bored ☐

(6) CASING SCHEDULE: Threaded ☐ Welded ☒
16 " Diam. from 0 feet to 21 feet Gage .280
10 " Diam. from 0 feet to 36 feet Gage .280
6 " Diam. from 0 feet to 955 feet Gage .280
New ☒ Reject ☐ Used ☐

(7) PERFORATIONS: Perforated? Yes ☒ No ☐
Type of perforator used cut by torch
Size of perforations ¼ inches by 2 ½ inches
652 perforations from 652 feet to 952 feet
perforations from ..... feet to ..... feet
perforations from ..... feet to ..... feet
perforations from ..... feet to ..... feet
perforations from ..... feet to ..... feet

(8) SCREENS: Well screen installed? Yes ☐ No ☒
Manufacturer's Name .....
Type ..... Model No. .....
Diam. ..... Slot size ..... Set from ..... ft. to .....
Diam. ..... Slot size ..... Set from ..... ft. to .....

(9) CONSTRUCTION:
Was well gravel packed? Yes ☐ No ☒ Size of gravel: .....
Gravel placed from ..... feet to ..... feet
Was a surface seal provided? Yes ☒ No ☐
To what depth? 35 feet
Material used in seal: cement
Did any strata contain unusable water? Yes ☒ No ☐
Type of water: Surface Depth of strata 21'
Method of sealing strata off: cement from 35' to surface

Was surface casing used? Yes ☒ No ☐
Was it cemented in place? Yes ☒ No ☐

(10) WATER LEVELS:
Static level ..... feet below land surface Date .....
Artesian pressure 1.6 feet above land surface Date Oct. 1960

LOG RECEIVED:

(11) FLOWING WELL:
Controlled by (check) Valve ☐
Cap ☐ Plug ☐ No Control ☐
Does well leak around casing? Yes ☐ No ☐

(12) WELL TESTS: Drawdown is the distance in feet the water level is lowered below static level.
Was a pump test made? Yes ☒ No ☐ If so, by whom? driller
Yield: 33 gal./min. with 730 feet drawdown after 6 hours
" " " " "
" " " " "
Bailer test none gal./min. with - feet drawdown after - hours
Artesian flow 1.21 g.p.m. Date October, 1960
Temperature of water 64 Was a chemical analysis made? No ☐ Yes ☒

(13) WELL LOG: Diameter of well 6 inches
Depth drilled 965 feet. Depth of completed well 965 feet.

NOTE: Place an "X" in the space or combination of spaces needed to designate the material or combination of materials encountered in each depth interval. Under REMARKS make any desirable notes as to occurrence of water and the color, size, nature, etc., of material encountered in each depth interval. Use additional sheet if needed.

DEPTH From	DEPTH To	Clay	Silt	Sand	Gravel	Cobbles	Boulders	Hardpan	Conglomerate	Bedrock	Other	REMARKS
0	21			X								sand sand rock
21	165									X		grey sand rock
165	180									X		15' Core grey sand rock
180	225									X		grey sand rock
225	240									X		15' Core grey sand rock
240	285									X		white sand rock
285	300									X		white & red sand rock
300	315									X		15' Core white & red sand R
315	360									X		white & red sand rock
360	375									X		15' Core white & red sand R
375	420									X		white & red sand rock
420	435									X		15' Core red sand rock
435	475									X	X	green sandy shale
475	520									X		white &red sand rock
520	565									X		white sand rock
565	585									X		white & red sand rock
585	600									X		red sand rock
600	620									X		red sand rock
620	675									X		white sand rock
675	740									X		white sand rock
740	755									X		15' Core white sand rock
755	965									X		white sand rock

Work started July 12, 1960 Completed Oct 29, 1960

(14) PUMP: (Used for test-pumping by Contractor)
Manufacturer's Name Advance Pump Company
Type: test Submersible H. P. 20
Depth of pump or bowles 740 feet

Well Driller's Statement:
This well was drilled under my supervision, and this report is true to the best of my knowledge and belief.
Name Uintah Basin Drilling Co (Person, firm, or corporation) (Type or print)
Address Roosevelt Utah
(Signed) D. L. Campbell (Well Driller)
License No. 91 Date Oct 29, 1960

USE OTHER SIDE FOR ADDITIONAL REMARKS

L-54

April 13, 1960

Montgomery

Heubner

PESmith

Memorandum

To: Chief of Design and Construction

From: Supervisory Engineer, WOIC

Subject: Investigations to Improve Quality of Quarry Area Water Supply, Dinosaur

The proposed test well drilling on the south side of the Green River adjacent to Dinosaur National Monument has caused considerable misunderstanding as evidenced by recent correspondence and an explanation of the origin of the idea is probably in order.

The existing water supply well north of the river and also five hand-auger test wells dug in the summer of 1959 produced water that was extremely hard and practically nonpotable. These samples were vastly different in chemical characteristics from the immediately adjacent water of the Green River and it was therefore concluded that the source was an underground flow other than river water (probably coming in from the north). At the suggestion of Consultant Engineer Richey of the Public Health Service and Engineer Montgomery of this office, auger holes were drilled on the south side of the river and preliminary tests of water obtained therefrom indicated water of a useable quality and similar in chemical characteristics to the water in the Green River. From this evidence it was deemed advisable to more thoroughly investigate the possibility of obtaining a satisfactory water supply south of the river and eliminate the necessity of the long pipe line from Split Mountain Gorge Campground.

It has been the intention of this office that any test well south of the river would be drilled deep enough to reach river water only but not penetrate the Entrada formation. If it were ultimately decided to investigate the Entrada as a source of water, the drilling would be done in the vicinity of Old Well No. 2.

(Sgd.) P. E. Smith

P. E. Smith
Supervisory Engineer

In duplicate

Copy to: Chief, Water Resources Section
Reg. Dir., Reg. Two
Supt., Dinosaur

Informational: Larson, Wright

RTMontgomery:cr

FILE COPY

L54-GBL

March 23, 1960

Memorandum

To: Regional Director, Region Two

From: Chief, Water Resources Section

Subject: Investigations to Improve Quality of Quarry Area Water Supply, Dinosaur National Monument

The memorandum of March 16 from Mr. Aiton correctly states that a well intercepting the Entrado aquifer, may be deep and may be deeper if drilled near the River than if further to the north. However, surface topography and strike would have to be checked more carefully than I have done it, to determine comparative depths at different locations.

The main point is that you have the alternative sources of sub-surface flow of the river, or water from the deeper aquifer. I do not think the sub-surface flow will be any better on the south side of the river than at Quarry Headquarters, and might not be any better at Split Mountain. That has to be determined.

My personal opinion, however, is that we should fully explore the Entrada formation and sub-surface in the Monument, before testing on the opposite side of the river. I assume that some extra depth in the first test well to be drilled near the river in the Quarry Headquarters would be cheaper than two wells in that area. The opinion of the USGS, from its study, would be a better guide than mine.

A. van V. Dunn
Chief, Water Resources Section

Copy to: Superintendent, Dinosaur
Chief, WODC (2)

W O D C
MAR 28 '60
CHF
ADM
PERS
P & P
ARCH
ENGR 4/13
L.A.
SPEC
CONT
SFTY
STION TAKEN - DATE

4/13/60 w/ copies to Reg, Supt & Wat. res. engr.

as far as I know it was never intended that the wells south of the river would do any more than check for availability of river water. Samples submitted from sub-drilled auger holes showed softer water than that on the north side of the river.

L54-OBL

March 4, 1960

Memorandum

To: Regional Director, Region Two

From: Chief, Water Resources Section

Subject: Investigations to Improve Quality of Quarry Area Water Supply, Dinosaur National Monument

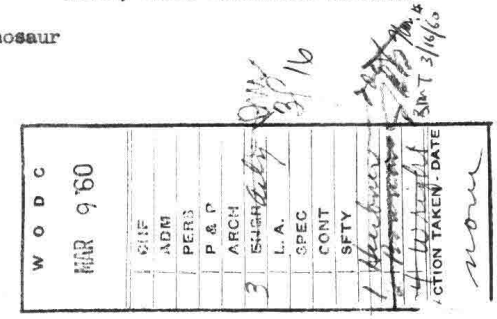
The memorandum of February 18 to the Superintendent from Mr. Gratton, and that of January 12 to you from the Superintendent, suggest that the three wells in the Quarry Headquarters area, across the River, and near Well 2 in the Split Mountain Campground Area would be only about 50 feet deep.

I do not wish to influence any decisions on the relative merits of serving the Headquarters area from a local well, or one at the Campground Area. However, it does seem to me that any test well in the Headquarters area should be so located, and drilled to sufficient depth to explore the full capacity of the aquifer which was only partially penetrated by Quarry Headquarters Well No. 2, in 1951. It would not be necessary to drill up on the hill near that well, unless the elevation were desired, but the well should be drilled to sufficient depth, at any site, to intercept the entire aquifer, before considering a well on the south side of the River.

SIGNED

A. van V. Dunn
Chief, Water Resources Section

Copy to: Superintendent, Dinosaur
Chief, WODC (2)



L54

FEB 18 1960

Memorandum

To: Superintendent, Dinosaur National Monument

From: Acting Regional Chief of Operations

Subject: Investigations to Improve Quality of Quarry Area Water Supply, Dinosaur National Monument

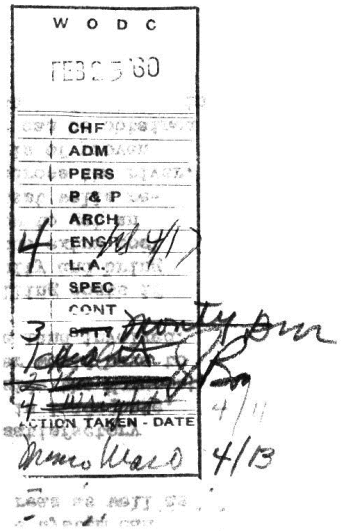
As discussed with Mr. Dick when in this office February 17, Mr. Mott will schedule a trip to arrive March 21 and supervise the test well drilling and pump testing described in Work Order DINO 1-WR-60.

Inasmuch as the well at site No. 2, Split Mountain Gorge Campground, is a proven supply of quality water, it is our opinion that test wells should first be drilled on the Monument side of Green River. We propose to drill one well in the area a short distance up stream from the present quarry well in the vicinity of the explorations made by your staff last fall. If a satisfactory supply can be obtained there, it will give you the alternate of using it for the source of water in the residential area and quarry developments or of testing the supply in the campgound to see if it is sufficient so that one system can serve the developments in the residential and quarry areas as well as in the campground.

If the test well near the quarry does not disclose a satisfactory supply and if the quantity of water at the campground is inadequate, it may be found advisable to go across the river, outside the Monument, to drill a test well. This would mean that the driller would have to await our obtaining of an option from the owner of the land involved.

While it would probably add somewhat to the total drilling costs if the driller has to remove his equipment from the vicinity and bring it back to drill a well across the river, we believe the extra cost can be justified against the expenses of proceeding now to get an option which would have no value if one of the prior test wells reveals that our requirements can be met without going across the river. Since the present well in the campground (site No. 2) is of proven quality and it is only a question of whether the water can be obtained in sufficient quantity, we believe there is a good chance of not needing to go across the river.

02-25-1960: stamp of receival



As Mr. Dick mentioned, this work would be accomplished under a purchase order involving solicitation of competitive quotations from well drillers. Mr. Dick seemed to think the quotations could be obtained and a driller selected in time to commence drilling operations about March 21. Mr. Mott will plan to be in the area March 21 unless you find that some other date will be better.

[SGD.] WELDON W. GRATTON

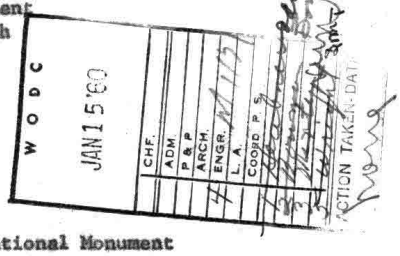
Weldon W. Gratton
Acting Regional Chief of Operations

Copy to: Director (2), w/c memo 2/12/60 from Mr. Dick
Chief, WODC (2)

L54

Dinosaur National Monument
Box 621 - Vernal, Utah

January 12, 1960



Memorandum

To: Regional Director, Region Two

From: Acting Superintendent, Dinosaur National Monument

Subject: Investigations to Improve Quality of Quarry Area Water Supply, Dinosaur National Monument

In reference to Mr. Baggley's memorandum of December 31 we have secured the following information relative to drilling test wells in an effort to locate a source of potable water for use in the Quarry Area:

1. Drill and case - $7.50 per foot - based on 3 wells, minimum 50 ft. each, 5 7/8" casing.

2. Pump test - $3.00 per hour with electric pump, power to be furnished by Park Service.

3. Chemical Analysis - no charge, State of Utah Health Department contributes this service connected with public water supplies.

4. Proposed site outside Monument - private ownership described as Lot 4, Sec. 35, T.4S, R.23E containing 75-76 acres, more or less.

5. Number of test wells - three, one at Split Mountain Campground; one upstream from present well northside Green River; one southside Green River opposite present well.

We suggest that Mr. Mott be assigned to supervise the work of drilling and testing the proposed wells since we do not have qualified personnel. Drilling and testing of these wells seems to be the most important phase in developing a source of water for the Quarry Area, and we would like to have the work done as efficiently as possible. Drilling can start immediately or at anytime in the future that may be convenient.

We have talked with the owners of the private lands in question and they are willing to make available, by sale, any portion of these lands which we may need for well development. A survey will be needed to determine our selection before an option can be negotiated. We have been unable to locate an engineer to make the survey. It may be possible to negotiate an option on the basis of acquiring all and/or a portion of these lands contingent upon development of a water source with selection and survey to be made after such development is accomplished. In either case, we would like to have your office draft an option for our use. The draft should contain provisions reserving mineral rights by the vendor and reservation of a life estate by the vendor. The subject lands are now used for livestock grazing. Our preliminary investigation has not revealed any water rights appurtenant to these lands, however the option should provide for transfer of any existing water rights to the Government.

If your office proceeds with the work order for the water investigations, we suggest $600 be included for personal service over and above funds required by Mr. Mott and approximately $400 as other direct costs.

We appreciate your continued interest in attempting to secure a potable water source for the Quarry Area and hope that this project will be successfully completed in the very near future.

Oscar T. Dick
Acting Superintendent

In dupl.
cc: WODC in dupl.

L54

12-31-59

WESTERN OFFICE
DESIGN & CONSTRUCTION
JAN 1 1960
CHIEF
ADMIN. ASSIST.
PERSONNEL
PLANS & PROG.
SAFETY
ARCHITECT
ENGINEER
LAND. ARCH.
2 Wright
3 Hendricks
4 Murphy
ACTION TAKEN DATE

Memorandum

To: Superintendent, Dinosaur National Monument

From: Regional Chief of Operations

Subject: Investigations to Improve Quality of Quarry Area Water Supply, Dinosaur National Monument

We have tentatively programmed $4150 of 1960 construction funds to drill one or more test wells in an effort to locate a source of potable water for use in the Quarry Area. Of the different sites that have been mentioned, i. e., on left (south) bank of Green River, on the right (north) bank of Green River or in the Split Mountain Gorge campground, we leave it to you whether to drill at one or each of these sites, so long as the costs do not exceed the programmed amount. A slight increase in funds for this work may be arranged if needed to carry the investigation a little farther, however the necessary arrangements must be made prior to starting the extended work.

Your decision should, of course, take into account the reports on water analyses in the Quarry Area and in the campground area, also your misgivings expressed in your November 13 memorandum about the practicality of WODC's suggested site across the river. WODC's suggestion, as discussed in Supervisory Engineer Smith's November 10 memorandum, seems to be based on a belief that the cost of obtaining water from that source would be much less than from Split Mountain campground. We believe you should not rule out the site across the river until the cost angles have been explored enough by you and WODC to be sure the anticipated savings would not be realized, or would not be enough to offset maintenance and operating disadvantages, including the accessibility of a well in this area.

Incidentally, due to the investigative nature of a test well, we see no way to justify expenditure of water resource funds for the 48-inch well suggested by Mr. Smith. We believe a 6-inch test well should permit a reasonable measure of the water potential.

In an effort to ascertain how you might go about arranging to drill a test well across the river on land outside the Monument, we asked Field Solicitor Cook for his opinion on the legality of

obtaining an option which would permit us to drill the test well and would guarantee us the right to purchase the land at a predetermined price if we desire to develop it as a water source after the results of the test are known. If the test revealed the land's impracticality as a source of water, the optiam simply would not be exercised. A copy of Mr. Cook's affirmative opinion, dated November 25, is attached.

If you decide to drill across the river, you should prepare a draft for an option, including a description of the lands required for drilling, the right of way for the power and water pipe lines, and the price negotiated with the owner for the land and right of way. If the price is anything more than what you might consider as nominal, you should request clearance to arrange for the services of a qualified appraiser. The draft of the option should be submitted to this office for review by the Field Solicitor prior to obtaining the signature of the land owner. As you know, authority for approval of the option rests with the Washington Office.

For the purpose of issuing a work order we will need a complete estimate of all costs. These would include the costs per foot for drilling and casing, and the cost per hour for well development and pump testing. You might obtain this information from a local driller. Estimate should also include costs for personal services and other direct costs relative to water analyses, supervision, etc.

The supervision of the test well drilling may be handled by some of your qualified personnel, or possibly Mr. Mott can arrange to provide this service. The estimated cost of supervision should be based on required time for the work to be accomplished, and include all other pertinent costs, such as per diem, travel, etc.

[SGD.] GEORGE F. BAGGLEY

George F. Baggley
Regional Chief of Operations

Attachment

Copy to: Director (2)
Chief, WODC (2)

Form 10-556
(June 1956)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

WORK ORDER

No. DINO 1-WR-60

Date Dec. 22, 1959

Area or Office: Region Two Office

Region: Two

General Ledger Acct. No.: 102.4

The Dinosaur National Monument (Organizational Unit) under the supervision of Superintendent is authorized and requested to proceed with the performance of the work or service described below in accordance with the detail and plan more specifically set forth in the drawing or plan referred to herein.

Fund Symbol: 14X 1035 (0343)

Statutory Authority (where necessary):

Plan No.:

Title and/or Description of Project or Service to be Performed

Test well drilling - exploration to locate suitable quality of water for Quarry Area supply.

PCP No.:

Year Programmed: 1960

Est. Starting Date: March 1960

Est. Completion Date: July 1960

Location of Work Requested: Split Mountain Gorge Campground and/or either bank of Green River (vicinity Well #3).

ESTIMATE OF COSTS

Components of Costs	Amount	Accts. Code	Project Features	Amount
Contract and/or other cost as required for accomplishment of work.	$4150		Test Well - drilling, casing, developing, pump testing, supervision, water analyses.	$4150
TOTAL	$4150		TOTAL	$4150

No.	Distribution of Copies TO
1	Accts. WASO
1	Budget WASO
1	Resou.Sec.-Water
4	Region Two -file
1	Dinosaur
1	Reg. Two - F.F.
1	Br.of Lands -Mott
1	USGS

Remark: This authorization sets the maximum to be expended on a refundable basis for the purposes described. Any balance not expended by next June 30 is automatically cancelled as of the close of the fiscal year. Unpaid June 30 obligations will be reprogrammed in the following F.Y

Approved by (Signature, Title, & Date): January 4 1960
Weldon W. Gratton, Actg. Reg. Ch. of Operations

Regional Office Clearance when Required (Signature, Title, & Date)

ALLOTMENT ACTION
Allotment Advice No.
Allotment Advice Date
Amount for Work Order

If Additional Space is Necessary, Use Reverse in Tumble Fashion

121621

Test Pumping Data. - Combined Flows (Entrada + Navaj

Dinosaur N.M. Test Well #3 965' depth. Oct. 4, 1960

Pump set @ 500' below Top casing

Time	Stop Watch.	Q	lbs/sq.in Gauge Reading	Draw-down ft below top of casing	
9:05P	.097	32.1	112	246 ft.	Plotted
9:25	.100	29.1	103	263	"
9:35	.110	26.5	97	276	"
9:45	.108	27.0	91	290	"
9:55	.110	26.5	89	294	"
10:20	.110	26.5	86	301	"
10:35	.110	26.5	82	310	
10:45	.110	26.5	80	315	
11:00	.110	26.5	78	320	
11:15	.110	26.5	84	306	Oxygen
11:25	.110	26.5	84	306	"
11.40	.110	26.5	84	306	
11:47	.070	41.5	93	308	
12:05A	.085	34.2	83	308	
12:15A	.085	34.2	83	308	
12:25A	.085	34.2	83	308	

Test Well #3 Spring Area. OINO. Thurs Oct 27. 1960.

Pump set at 740' depth.

Starting Pumping @ 4.45 P.M.

Stopped pump @ 10.30

Time	Pressure lbs/sq in	static Head.	Drawdown ft	Q
5:05 P.M.	36	83'	657	14.2
5:20	25	57.5	682	13.0
5:50	11			8.0 changed gauges.
6:05	10	23.1	717	8.8
6:25	10	23.1	717	9.4
6:40	10	23.1	717	9.4
6:55	10	23.1	717	9.1
7:15	10	23.1	717	9.4
7:30	10	23.1	717	9.1
7:45	10	23.1	717	9.4
8:00	10	23.1	717	9.4
8:15	10	23.1	717	9.4
8:30	10	23.1	717	9.1
8:45	10	23.1	717	9.7
9:00	10	23.1	717	9.4
9:25	9	20.8	719	9.4
9:35P	10	23.1	717	13.2
9:50	14.5	33.5	706	10.5
10:10	12.0	27.7	712	9.7
10:25	10.0	23.1	717	10.4
10:50	10.0	23.1	717	8.9
12:10	3.	6.9	743	9.1
12:45	3	6.9	743	8.1

Total Pumping Time = 19.5

Pump set at 740
Fri. Oct 28, 1960

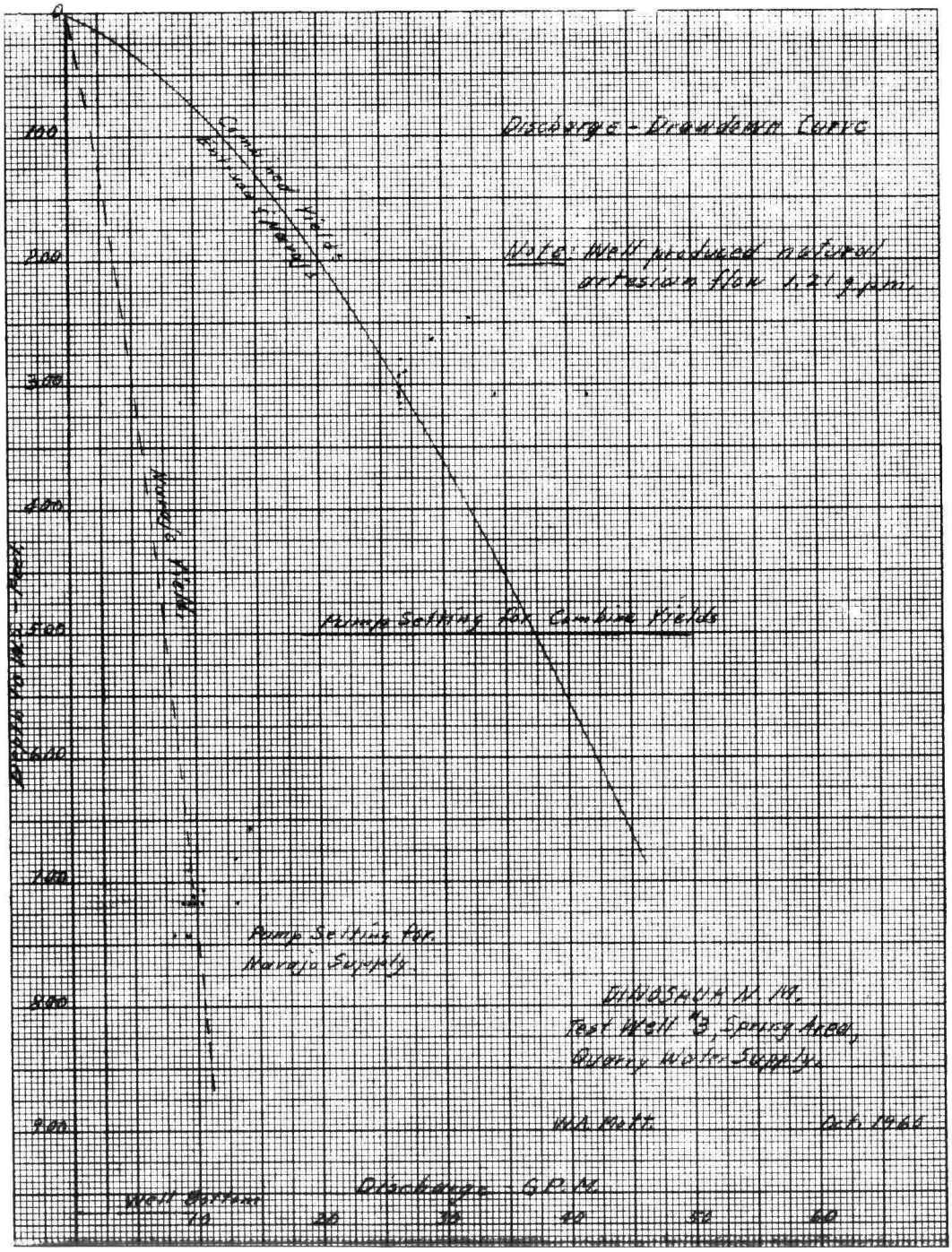
Test Well #3 - Spring Area. DINO

Time	Gage lbs/sqin X	Static Head	W.S. below Top Casing	Stop watch Seconds X	Q
1:00	3	6.9	743	31	9.4
1.20	3	6.9	743	31	9.4
1.40	3	6.9	743	31	9.4
2.00	3	6.9	743	32	9.1
2.20	3	6.9	743	31	9.4
2.40	3	6.9	743	31	9.4
3.00	3	6.9	743	31	9.4
3.20	3	6.9	743	32	9.1
3.40	3	6.9	743	32	9.1
4.00	3	6.9	743	31	9.4
4.20	3	6.9	743	32	9.1
4.40	3	6.9	743	31	9.4
5.00	3	6.9	743	32	9.1
5.20	3	6.9	743	31	9.4
5.40	3	6.9	743	31	9.4
6.00	3	6.9	743	31	9.4
6.20	3	6.9	743	31	9.4
6.40	3	6.9	743	31	9.4
7.00	3	6.9	743	31	9.4
7.20	3	6.9	743	31	9.4
7.40	3	6.9	743	32	9.1
8.00	3	6.9	743	30	9.7
8.20	3	6.9	743	30	9.7
8.40	3	6.9	743	30	9.7

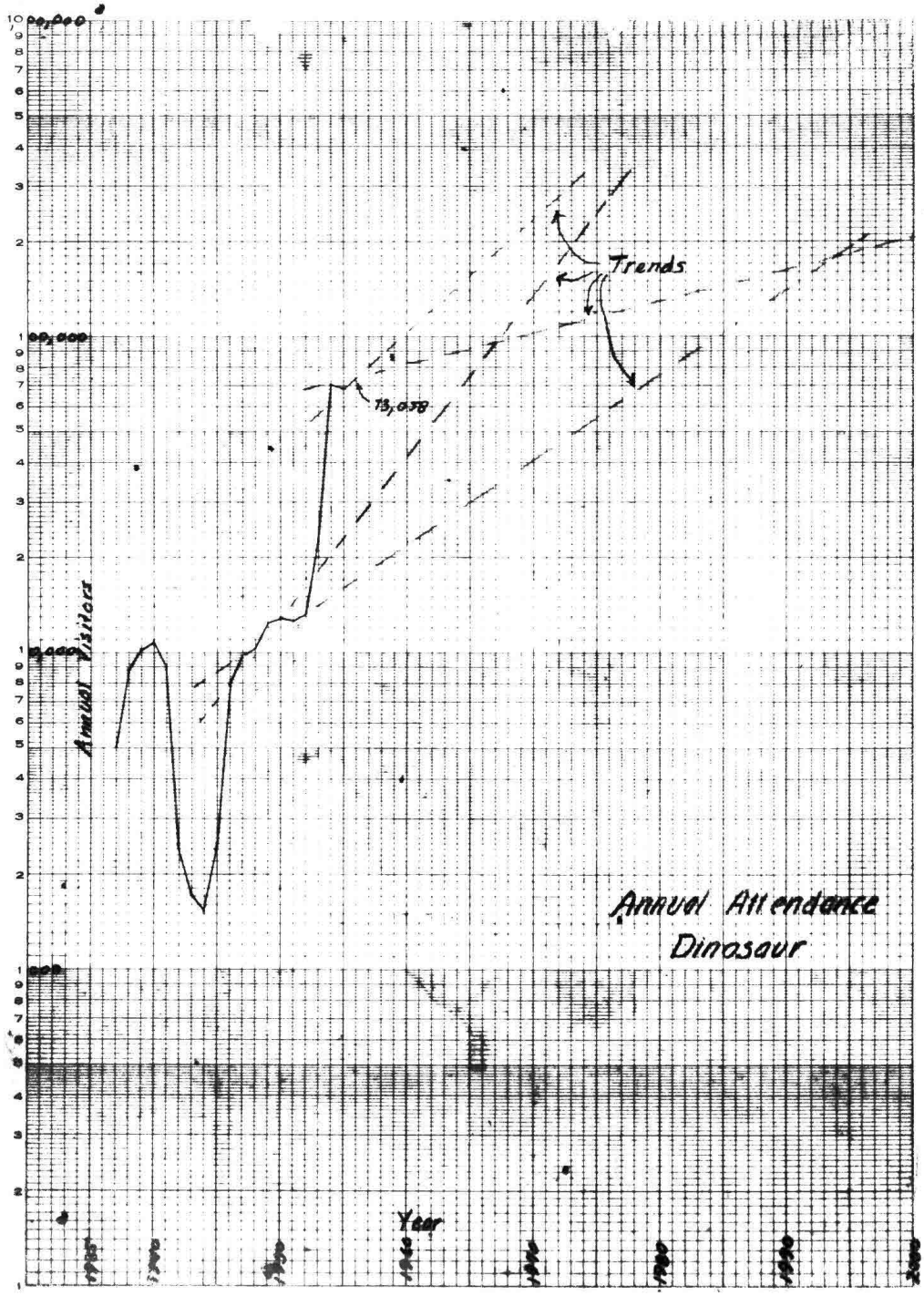
Time A.M.	gage	Static Head	W.S. below Top casing	Second	
9:00	3	6.9	743	31	9.4
9:20	3	6.9	743	33	8.8
9:40	2	4.6	745	34	8.6
10:00	2	4.6	745	34	8.6
10:20	2	4.6	745	36	8.1
10:40	2	4.6	745	35	8.3
11:00	2	4.6	745	36	8.1

Pumping stopped @ 12:30 PM. Oct 28, 1960.

00-00-0000: graph



00-00-0000: graph of annual attendance trends



	Spring	Well No. 1 NPS Log	Well No. 2 NPS Log	Well No. 2 Driller's Log
El.	5153.0	5190.0 (surface elev.)	5160.0 (surface elev.)	5160.0 (surface elev.)
		39.5 Clay & Shale	20.0 surface mantle & quick sand	20.0 surface mantle & quick sand water in quick sand
		5150.5	5140.0	5140.0
		33.5 fine sand stone & water elevation 5150.5 to 5143.0	38.0 soft sand stone	38.0 soft sand stone
		5117.0	5102.0	5102.0
		Well was bailed at rate which stopped spring flow. Spring flow returned to normal after well was back filled.	6.0 hard sand stone	5.0 lime stone
			5096.0	5097.0
			98.0 tight sand stone	99.0 blue sand stone
			4998.0	4998.0
			3.0 white sand stone & water from 5010-4992	2.0 white sand stone
			4995.0	4996.0
			3.0 hard sand stone	2.0 sand stone
			4992.0	4994.0
				2.0 blue shale
				4992.0
				Cased 5160-5136.5
				Water rose to 4 ft. below top (elev. 5156) but lower aquifer not designated by well driller.

11-13-1959: memorandum to regional director regarding improvement of quarry area water supply

LS4

Dinosaur National Monument
Box 621 - Vernal, Utah

November 13, 1959

copy made for Smith pmw.

WESTERN OFFICE
DESIGN & CONSTRUCTI
NOV 16 1959A
CHIEF
ADMIN. ASSIST.
PERSONNEL
PLANS & PROG.
SAFETY
ARCHITECT
ENGINEER
LAND. ARCH.
ACTION TAKEN—DATE

Memorandum

To: Regional Director, Region Two

From: Superintendent, Dinosaur National Monument

11/17 acts 2

Subject: Improvement of Quarry Area Water Supply, Dinosaur National Monument

We have some comments on Supervisory Engineer P. E. Smith memorandum of November 10.

The Pacific Northwest Pipeline (natural gas 30" diameter) crossed Green River about 2 miles below the crossing proposed in Mr. Smith's memorandum. They ran into lots of delay and it proved very costly. We think the cost of crossing Green River with a pipeline might exceed the cost of the 3 miles of pipeline laid (along the road most of the way) to the Split Mountain campground.

30" gas filled line would be much harder to install Ours. pmw.

The present pump has pressure activated switch and seems to require manual operation most of the time as the pressure switch cannot be kept in proper adjustment. A well located across the river would require a roundtrip of over 30 miles to service. Perhaps a cable car should be installed to facilitate the maintenance, as daily attention is anticipated. (The tank freezes in from sides and top too much to allow for float activated switch).

Boat? pmw.

If it is decided to lay a pipeline across the river, it should be done during the extreme low water stage in the Fall or Winter months. It would be practically an impossibility during Spring run-off stages of the river.

Something, however, should be done soon to improve the water at the Quarry Area. We will be glad to proceed with the steps "a", "b" and "c" outlined in Mr. Smith's memorandum if water resource funds are available.

(Sgd) Jess H. Lombard
Superintendent

Jess H. Lombard
Superintendent

In dupl.
cc: WODC in dupl.

L-54

Montgomery

Heubner

Smith

November 10, 1959

Memorandum

To: Superintendent, Dinosaur National Monument

From: Supervisory Engineer, WORC

Subject: Improvement of Quarry Area Water Supply, Dinosaur

The two samples of water transmitted by Acting Superintendent Dick's memorandum of October 29 have been analyzed with results as follows:

Sample No.	Hardness (gr./gal.)	Hardness (p.p.m.)	pH
1	18	308	7.5
2	16	274	7.5

While this water is hard when rated by U. S. Public Health Service standards, it is well within the limits of potability. When these last samples are compared to water from the existing well (1800 p.p.m.!) and from the samples transmitted by Mr. Dick's memorandum of October 6 (735 to 3129 p.p.m.!), it would seem possible that a satisfactory source might be developed south of the river.

We realize that the land south of the river is outside of the Monument boundaries, however, since the cost of development should prove much less than a pipe line from Split Mountain or drilling a well adjacent to old well No. 2, it is recommended that this source be investigated further. The tank (and cost) of installing a pipeline well below the river bed for a crossing should not prove too large.

If you and the Regional Director agree with the above recommendation and the investigation can be financed from water resources funds, it is further recommended that you:

a. Obtain permission from the land owner to dig a well and make the necessary tests.

b. Obtain the services of a local driller to drill the well and install a four-foot diameter perforated pipe with gravel pack and test pump the well to determine its yield capacity.

FILE COPY

c. Run a complete chemical analysis test of the well water.

(Sgd.) P. E. Smith

P. E. Smith
Supervisory Engineer

In duplicate

Copy to: Reg. Dir., Reg. Two
Proj. Supv. Larson
Mr. Wright (PHS)

Informational: Heubner

RTMontgomery:cr

10-16-1959: memorandum to chief, western office division of design and construction regarding improvement of quarry area water

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
Dinosaur National Monument
Box 621 - Vernal, Utah

L54

October 16, 1959

Memorandum

To: Chief, Western Office Division of Design and Construction

From: Superintendent, Dinosaur National Monument

Subject: Improvement of Quarry Area Water Supply, Dinosaur

We have reviewed Supervisory Engineer P. E. Smith's memorandum of October 13 on this subject and have the following comments:

1. The samples sent your office for hardness tests were all from shallow, hand-auger holes. We thought perhaps machine bored test wells somewhat deeper to try and tap the gravel deposits might give better water.

2. We will proceed to hand-bore a couple of test holes on the south side of the river and send you samples as per the suggestion in Mr. Smith's memorandum. Winter ice and heavy spring run-off floodstages in Green River makes us doubt the practicability of a water line crossing the river.

3. The Bureau of Public Roads ground control survey crew is finishing up their work in connection with the photogrammetric survey of the Quarry Area to Blue Mountain Junction road route. They are going to extend the ground control survey work enough to give us any topography needed for a well at the lower end of the Split Mountain Gorge Campground and a pipeline from there to the Quarry Area headquarters development. The electric power supply will also be included in the area covered by the topography.

4. The Well No. 7 (Q.S. Well No. 2) may or may not be suitable for deepening. It may be better to start fresh from surface. We do not have any comment on the chances of an adequate supply of water being obtained at a depth of 900 to 950 feet.

5. We are still reluctant to approve a river water treatment plant except as a last resort.

WESTERN OFFICE
DESIGN & CONSTRUCTI
OCT 22 1959A.
CHIEF
ADMIN.ASSIST.
PERSONNEL
PLANS & PROG.
SAFETY
ARCHITECT
ENGINEER
LAND. ARCH.
ACTION TAKEN—DATE
None
J Manley
PWW 10/26

will check when received

The samples from south of the Green River should be going your way soon.

Jess H. Lombard
Superintendent

In dupl.
cc: Reg. Dir., Reg. Two in dupl.
Proj Supervisor Larson

L-54

October 13, 1959

Montgomery

Smith

Memorandum

To: Superintendent, Dinosaur National Monument

From: Supervisory Engineer, WOIC

Subject: Improvement of Quarry Area Water Supply, Dinosaur

The samples of water from the test wells, transmitted by Acting Superintendent Mick's memorandum of October 6, have been analyzed with results as follows:

Sample No.	Total Hardness	Iron *	PH
1	2018 ppm	0.1 ppm	7.5
2	3189 "	0.1 "	7.5
3	3078 "	0.1 "	7.5
4	3471 "	0.1 "	7.5
5	735 "	0.1 "	7.5

(* Color from Iron test could be from turbidity and not actually iron.)

Since the maximum total hardness, without treatment, recommended by the Public Health Service is 250 ppm, none of these locations could be recommended as a water source. Since we have found no satisfactory underground water in any of these test wells, nor in the present well, I believe we must conclude that the underground water on the northerly side of the river comes down from the adjacent hillsides or at least from a greater distance than directly from the river. The story could be entirely different on the southerly side of the river; therefore, would it be possible for your forces to drill one or two test holes across the river from the present well and pumphouse? Preliminary analysis of the water samples could be made in this office.

With the elimination of any well in the vicinity of the existing well as a possible source, the following sources seem to remain:

1. Study of U.S.G.S. Geologist Smith's report indicates that well No. 7 (U.S. Well No. 2, drilled in 1951) barely penetrated the Entrada formation. If that well could be deepened to obtain good penetration into the Navajo formation, a good supply could be developed. A depth of 900' to 950' below the surface might be required.

FILE COPY

This would be in lieu of the 2300'± that would be required at point "P" shown on figures 3a and 3b of the report. We could expect the water high enough in the well so that the pumping depth would be considerably less than the 900-950-foot drilling depth.

2. Deepen and develop well No. 2 in the Split Mountain Campground and use it as a source for both the campground and the Quarry Area. This would require a pumping system and reservoir at the campground and a 2½-mile (more or less) pipeline to the Quarry Area. This system would have the added advantage of serving as a pressure water supply for the campground distribution system and comfort stations.

3. Construction of a plant in the vicinity of the present well and pump to treat Green River water. The treatment plant would be similar to that which was outlined to you by Engineers Richey and Montgomery last summer and which you were reluctant to approve on account of the operational expense involved.

A preliminary estimate of the costs involved would be as follows:

Source	Construction Cost	Operation & Maintenance
Deepen Well No. 7	$15,000	Power only
Split Mountain	45,000	Power only
Treatment Plant	30,000	Power plus 1/2 man-year
Well South of River	10,000	Power only

Your comments and those of the Regional Office concerning these ideas will be appreciated.

(Sgd.) P. E. Smith

P. E. Smith
Supervisory Engineer

In duplicate

Copy to: Reg. Dir., Reg. Two
Proj. Supv. Larson

Informational: Heubner, Wright

RTMontgomery:cr

IN REPLY REFER TO:

L54

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
Dinosaur National Monument
Box 621 - Vernal, Utah

October 6, 1959

Memorandum

To: Chief, Western Office Division of Design and Construction

From: Superintendent, Dinosaur National Monument

Subject: Improvement of Quarry Area Water Supply, Dinosaur

In reference to Supervisory Engineer Smith's memorandum of September 30 we completed five shallow test holes. A water sample from each was mailed to your office today under separate cover.

Oscar T. Dick
Acting Superintendent

In dupl.
cc: Reg. Dir., Reg. Two
Proj. Supvr. Larson

WESTERN OFFICE
DESIGN & CONSTRUCTION
OCT 8 1959 A.M.
CHIEF
ADMIN. ASSIST.
PERSONNEL
PLANS & PROG.
SAFETY
ARCHITECT
ENGINEER
LAND. ARCH
X
ACTION TAKEN—DATE
Memo 10/13

09-30-1959: memorandum to superintendent regarding improvement of quarry area water supply

L-54

Mem.
Montgomery
Heubner
Smith

September 30, 1959

Memorandum

To: Superintendent, Dinosaur National Monument

From: Supervisory Engineer, WCBC

Subject: Improvement of Quarry Area Water Supply, Dinosaur

I am extremely sorry that no action was taken on your memorandum of August 11, subject as above, but that memorandum was simply lost in the shuffle.

If it is still possible we would like to have four or five-ounce samples of water from any or all of the test holes. We can test the water for total hardness here at the office without having a detail chemical analysis made.

Information from these tests might provide information on which to base decision relative to further test drilling.

(Sgd.) P. E. Smith

P. E. Smith
Supervisory Engineer

In duplicate

Copy to: Reg. Dir., Reg. Two
Proj. Supv. Larson

Informational: Heubner, Wright

RTMontgomery:cr

FILE COPY

IN REPLY REFER TO:

L54

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
Dinosaur National Monument
Box 621 - Vernal, Utah

August 11, 1959

Memorandum

To: Chief, Western Office Division of Design and Construction

From: Superintendent, Dinosaur National Monument

Subject: Improvement of Quarry Area Water Supply, Dinosaur National Monument

When Dick Montgomery and Curt Ritchie were here July 22, Monument staff and Region Two Hydraulic Engineer William Mott participated with them to try to figure out some feasible means of improving the Quarry Area water supply.

The possibility of locating a shallow well, reasonably near the water system, that would produce an adequate supply of water of acceptable quality was discussed on the ground. It was agreed that Monument personnel would bore some test holes at several locations near the bank of Green River to see if sand or gravel beds could be found to serve as a natural filter for river water. We have bored six holes as deeply as we can with our hand-operated equipment. The approximate locations are shown on the enclosed tracing of a portion of Drawing No. NM-DIN-6972, Water System Quarry Headquarters.

WESTERN OFFICE
DESIGN & CONSTRUCTION
AUG 12 1959 A.M
CHIEF
ADMIN. ASSIST.
PERSONNEL
PLANS & PROG.
SAFETY
ARCHITECT
2 ENG. Mott 8/20
LAND. ARCH.
ACTION X 1 Montgom
ACTION TAKEN—DATE
Memo 8/20

Test Hole No. 1

Location: From present well house, S.50°, E.1187 ft.
Depth of hole: 17 ft.
Distance from river: 45 ft. August '59 and 25 ft. at 1959 high water
Material in bottom of hole: light sandy silt
Remarks: A lens of coarse gravel and cobble rock shows as a bar running out into river bed at this point and apparently runs back under the test hole site. Water in hole stopped further progress on test hole with our hand auger. This site is recommended for boring a well by machine, installing temporary casing and pump testing.

Test Hole No. 2

Location: From present well house, N.67° W.321 ft.
Depth of hole: 15 ft.
Distance from river: 58 ft. in August '59 and 50 ft. in 1959 high water.
Material in bottom of hole: Light sandy silt
Remarks: Water stopped progress. No reason to believe gravel or coarse sand present.

Test Hole No. 3

Location: From present well house, N.67° W.361 ft.
Depth of hole: 16 ft.
Distance from river: 58 ft. in August '59 and 50 ft. in 1959 high water.
Material in bottom hole: Light sandy silt.
Remarks: Water stopped progress. No reason to believe gravel or coarse sand present.

Test Hole No. 4

Location: From present well house, N.70° W.435 ft.
Depth of Hole: 15 ft.
Distance from river: 65 ft. in August '59 and 57 ft. in 1959 high water.
Material in bottom of hole: Light sandy silt.
Remarks: Water stopped progress. No reason to believe gravel or coarse sand present.

Test Hole No. 5

Location: from Section corner common to Sec. 26, 27, 34 and 35, S.77° W.782 ft.
Depth of hole: 20 ft.
Distance from river: 75 ft. August '59 and 15 ft. high water 1959.
Material in bottom of hole: Light sandy silt.
Remarks: Water stopped progress. There is lens of coarse gravel and cobble rock extending as a bar in the river bed. This apparently also extends under the sites of test holes No. 5 and 6. It is recommended that a test hole be machine bored, temporarily cased and pump tested near this site to try to tap the gravel lens.

Test Hole No. 6

Location: from Section corner common to Sec. 26, 27, 34 and 35, S.80° W.982 ft.
Depth of hole: 15 ft.
Distance from river: 80 ft. August '59 and 55 ft. 1959 high water.
Material from bottom of hole: Light sandy silt.
Remarks: Water stopped progress. Same gravel lens as under Hole No. 5.

We also believe that although no gravel or coarse sand was encountered in holes 2, 3 or 4 a test hole should ~~also~~ be machine bored here, temporarily cased and pump tested. That would total three test wells each about 20 to 30 ft. deep, possibly 2 ft. in diameter with culvert pipe or some other temporary casing perforated at lower end.

According to the bid price on Contract 14-10-232-316 for Split mountain Gorge Campground, the test wells might cost as much as $1,000 each. We believe that by contracting the boring and the placing of the culvert pipe casing on a supply contract basis per hour of rig operation and by doing the pump testing, etc., by day labor we can cut the cost to $700 or less for each of three test wells.

Do you want us to send a small water sample from each test hole so Mr. Ritchie can make hardness tests?

We are sending a copy of this memorandum and the drawing to Region Two so that they may consider the matter of financing these test holes.

Jess H. Lombard
Superintendent

In dupl.
cc: Reg. Dir., Reg. Two in dupl.

L54-OBL

REG. DIRECTOR
ASST. REG. DIRECTOR
CHF. DIV. OF ADMIN.
CHF. DIV. OF OPERATIONS
CHF. DIV. OF INTERP.
CHF. REG. RES. PLANNING
CHF. RANGER ACTIVITIES
FIELD SOLICITOR
Mott
ACTION TAKEN
FILE

Original material filed in L54

December 9, 1958

Memorandum

To: Regional Director, Region Two

From: Chief, Water Resources Section

Subject: Investigation of Potential Water Supplies for Headquarters Development and Analyses of the Present Quarry Headquarters Supply, Dinosaur National Monument Docket no. 1

As a result of Mr. Mott's memorandum of November 17, we are attaching an interim print of Drawing NM-DIN-6972, as of July 25, 1955, and two prints of my section A-A through Wells 1 and 2 at the Quarry Headquarters. One print of each is also being sent to the Superintendent and WODC.

The print of section A-A, but not the print of Drawing 6972, was sent to the State Engineer with my letter of July 7, 1955. I am filing the drawing, section A-A, and my copy of the letter to the State Engineer, in that order upward, just above the copy of the request for extension of time of January 31, 1955, in Part II of Docket 1. The copy of the published notice of August 11, 1955, and order of September 20, 1955, granting extension of time, should then fall above the letter of July 7, 1955, in that order.

We can supply extra prints of section A-A, if needed. A photostat of Drawing 6972 of that date would have to be made, and you and WODC are able to make equally good ones from the attached prints.

Before considering any further well supplies which would intercept water other than the subsurface flow of the Green River there should be a comprehensive geological investigation and justification should be prepared. If such a project were to be scheduled, presumably by the Geological Survey, Mr. Waite would doubtless first wish to review the contents of Parts I and II of the docket, in order to define the scope and probable cost. Prints of 6972, sheet 1 of 5307-A, section A-A, and the logs of the two wells, and well driller's report on Well 2 would be most important. I do not think Wells 1 and 2 have penetrated sufficiently into the most voluminous water source. Hence, mere pump tests do not seem justified.

The need for any such well is not clear to me. I do not understand why Well 3, diverting subsurface flow of the Green River, is not a suitable supply.

It is gathered that you think you can obtain a suitable water supply for the new Headquarters from the town of Artesia, and that a search for an independent source is not justified--subject to pending report from the Geological Survey. That is a matter for you, WODC and the Geological Survey to determine.

This brings us to the question of 1959, 1960, and 1961 programs and budget estimates. The first two are limited, and that for 1960 may have to be reduced if all requested funds are now allowed. The preliminary estimates for the 1961 budget will be due in a month or so, and we do not yet have even preliminary suggestions. You should review the 1959 and 1960 programs as outlined in the 1960 estimates which Mr. Mott and I prepared in September, submit any desirable changes within the indicated ceilings, and then prepare your 1961 program and estimates.

SIGNED

A. van V. Dunn
Chief, Water Resources Section

Attachments 3

Copy to: Superintendent, Dinosaur, with 2 attachments
Chief, WODC, with 2 attachments

Ems

REPORT ON SHAFT DUG FOR WATER IN DINOSAUR NATIONAL MONUMENT, UTAH

By

Carroll H. Wegemann
Geologist

NATIONAL PARK SERVICE
REGION TWO

December 13, 1939

Report on Shaft Dug for Water in Dinosaur National Monument, Utah

by

Carroll H. Wegemann

On November 28, 1939 in company with Messrs. Canfield, Fry and Priester, the writer visited Dinosaur National Monument in order to make an examination of the deep shaft recently dug for water. The shaft has been dug on the west side of the draw in which the spring which supplies the camp with water is situated, the elevation of the top of the shaft being 5189.7 feet. The elevation of the spring is 5157.03 feet. The spring flows from a bed about 39 feet below the top of a thick sandstone series about 170 feet in thickness which is underlain by Red Beds and overlain by the greenish marine shale of the Sundance. The entire sandstone may represent the Nugget sand at the top of the Red Beds, but it is more probable that the upper part may represent the basal sand of the Sundance formation. The age is immaterial as far as the water supply goes. There is no parting of shale in the entire thickness of the sandstone, but there is a great difference in the coarseness and consequent porosity of the sand in different beds. The sandstone at the spring dips 5½ degrees to the south and as shown in the accompanying photographs is very well exposed. At the base of the overlying marine shale there is about two feet of thin bedded sandstone and below this a white sandstone ledge 25 feet and 6 inches in thickness. This sandstone is of medium fine grain and as shown in the test shaft has low porosity and yields water very slowly. In the shaft it was encountered at about 38½ feet. Dr. Boyle records in his notes that a seep of water was struck at 36½ feet presumably at the top of the thin bedded sandstone. In the accompanying sketch the depth to this seep was taken as the starting point for the drawing. The thickness of the various sandstone beds were measured with tape on the surface, allowance being made for dip.

Below the upper ledge of white sandstone is 12 feet of very fine grained greenish yellow sandstone in the middle of which the spring has been developed. This sandstone appears saturated with water which is apparently drawn into it by capillarity from a coarse sand which lies below it. In the development of the spring Dr. Boyle tunneled into the fine sandstone on the east side of the bed of the gulch and then with an auger bored horizontal holes into the north side of the tunnel. These holes were from three to eight feet long and apparently entered or came very close to the coarse sandstone bed inasmuch as water flowed in small streams from all of the holes.

This coarse sandstone is of high porosity and outcrops as a ledge on the surface below the 12 feet of fine grained sandstone just described. The coarse sandstone is 11 feet thick. Below it lies 40 feet of fine grained white sandstone which rests on at least 100 feet of fine grained sandstone slightly pinkish in color, which is undoubtedly the Nugget. The overlying beds which are involved in the water problem may, as stated above, be part of the Nugget or as seems more probable may be the basal beds of the Sundance formation. As shown in the accompanying sketch the shaft has penetrated only the top bed of fine grained white sandstone.

If the shaft is continued the 12 foot bed of very fine grained greenish sandstone should be encountered on the north side of the shaft in about 15 feet. At a depth of 37 feet below the present level the top of the coarse sandstone which we believe to be water bearing, should be encountered at a level 12½ feet below the bench mark at the headquarters building. It is my opinion that a good supply of water should be encountered in this sandstone judging by the presence of the spring which seems to derive its water from the same bed. How fast the water will rise in the hole is of course a question for the porosity of the sandstone may change from place to place and may not be as great where encountered in the shaft as it is in the weathered surface exposure near the spring. Even were the head of water to rise to the level of the spring as I believe it will do, it is apparent that if we tap the shaft 15 feet below the spring level thus allowing 50 feet of head above the B.M. at headquarters which is on the flat on which the buildings stand, we would have only as a reservoir the capacity of the shaft above the point at which we tapped it or 540 cu. feet of water. This is equivalent to about 4,050 gallons. Of course, if we obtained rapid flow from the sandstone this amount might be sufficient, but if the water flowed slowly this storage would be inadequate in case of fire. A pump might be used in an emergency, but it would obviously be better to have a large reservoir at the point at which the shaft is to be tapped. Were a horizontal tunnel 5 x 7 feet driven northward from the shaft the base of the tunnel being 15 feet below the level of the spring or 52½ feet below the surface at the top of the shaft, the water bearing sandstone should be encountered in 40 feet at the floor level of this tunnel. The tunnel in itself were it made 5 x 7 feet would have a capacity of 11,800 gallons which added to the capacity of the shaft above the tunnel would make a total capacity for storage of 15,860 gallons. Were the tunnel driven some distance into the water bearing sandstone, this capacity would be increased.

It has been suggested that in digging this tunnel the waste rock might be dumped into the present shaft thus filling it up to

the level of the mouth of the tunnel. I see no objection to this procedure as I believe the chances are greatly in favor of obtaining a good supply of water in the horizontal tunnel. We do run a chance, however, of encountering the water sand at a point where its porosity might be lower than expected.

It has also been suggested that the present shaft be abandoned and that a new shaft be dug from the surface somewhat to the north of the present shaft and possibly part way down the side of the gulch in which the spring lies. Such a shaft might be so located as to encounter the water-bearing sandstone at a depth of about 30 feet or about 15 feet below spring level. The available capacity in this shaft would be only 4,050 gallons and it would probably be necessary to run tunnels from the base of the shaft east and west into the water bearing sand. Such work might be difficult were a considerable flow of water encountered in the coarse sandstone. It should be noted that if a tunnel is run as described above north from the present shaft most of the tunneling will be done in sandstone which contains but little water.

The writer believes it advisable to allow the water in the present shaft to rise as high as it will go in order to establish its head which should be at the level of the spring. Although the water in the present shaft appears to be separated from the water bearing sand by the very fine grained sandstone in which the spring has been excavated, the head of water in the upper sandstone and in the coarse water bearing sand below should be the same and the establishment of the point to which the water will rise in the shaft will thus be of aid in planning further development.

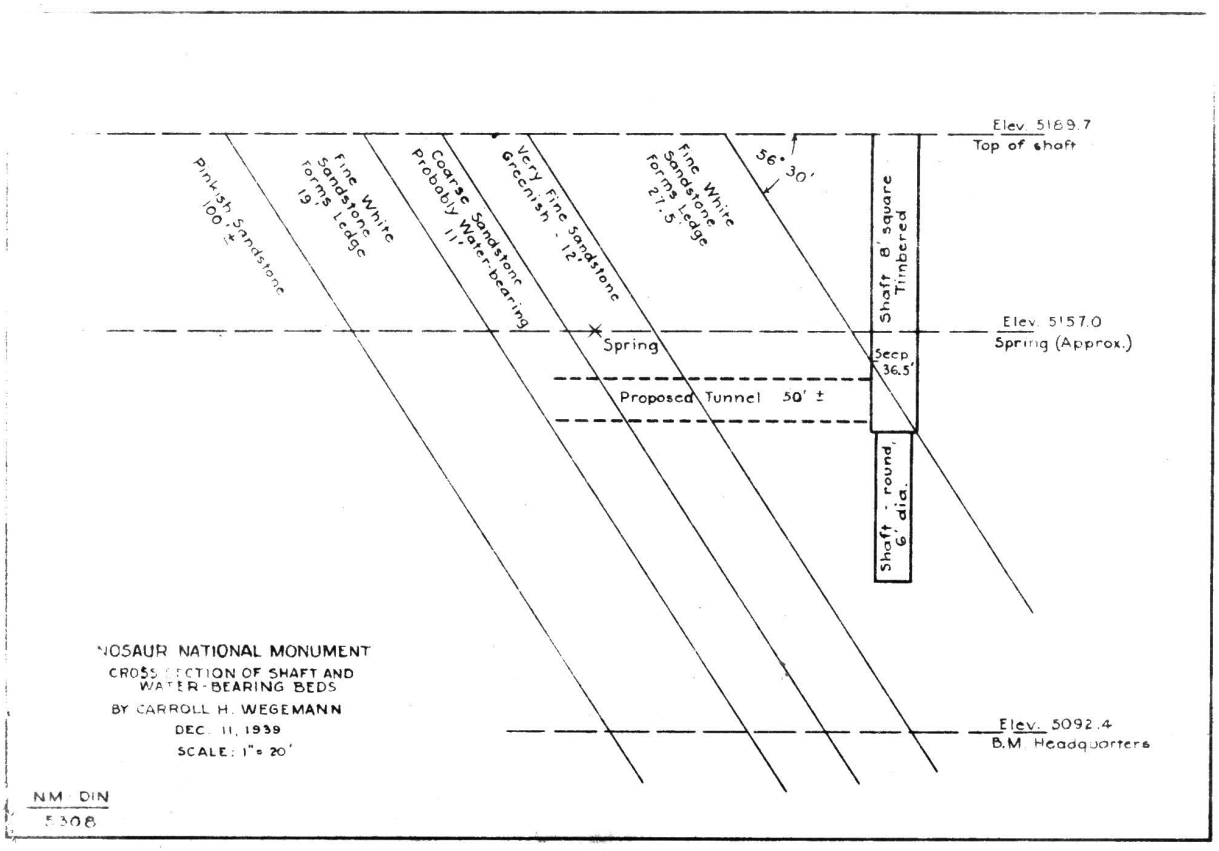
The spring is at present full of water and the supply is now being used by the camp. The digging of the shaft has apparently had no effect on this supply and the fact that it was necessary to haul water for one or two days probably meant that there was excessive use of the water from the spring during a dry period and that the consequent decrease had nothing to do with digging the shaft.



Pl. 1
View west showing shaft and thick sandstone series part of which is water bearing. On the skyline at center is seen the Sundance shale with the fine grained 27' sandstone in three ledges just below it. This is the bed penetrated by the present shaft. The smooth white bed below is the 13' fine sandstone in which the spring has been developed and just below this, partly covered by trees, the bed of course sandstone in which we expect to find water. At the center of the picture this bed lies under the snow covered slope midway between the largest cedar and the smaller one north of it. The spring is in gulch at lower left.



Pl. 2
Looking east, spring in gulch at left center in deep shadow. Coarse sandstone in which we expect water is in depression between the two ridges and directly above spring. Smooth sandstone on left is Nugget. Shale on right is Sundance in which shaft was begun. Ridge at right center is top sandstone in which shaft now is. Dip of beds (inclination from horizontal) is 56° 30'.


Elev. 5189.7
Top of shaft
Pinkish Sandstone
100' ±
Fine White
Sandstone
forms Ledge
19'
Coarse Sandstone
Probably Water-bearing
11'
Very Fine sandstone
Greenish - 12'
Fine White
Sandstone
forms Ledge
27.5'
56° 30'
Shaft 8' square
Timbered
Elev. 5157.0
Spring (Approx.)
Spring
Seep
36.5'
Proposed Tunnel 50' ±
Shaft - round
6' dia.
Elev. 5092.4
B.M. Headquarters
DINOSAUR NATIONAL MONUMENT
CROSS SECTION OF SHAFT AND
WATER-BEARING BEDS
BY CARROLL H. WEGEMANN
DEC. 11, 1939
SCALE: 1" = 20'
NM DIN
5308

Listed on well record .....
Letter by Coalbed .....
Copied 12-6-1952
Exam. & Recorded M.V. 8-12-52
Exam. for filing M.V. 8-12-52
Final Copy checked .....
Platted & No. Assigned .....
Indexed 12-15-52
Engr. filed Well .....
Engr. set BM .....
Well No. (D-4-23)26

PAGE ..... (Leave Blank)

Report No. 9300
Filed June 4 1952
Rec. By BW
Ret'd .....

D-11-

Report of Well and Tunnel Driller
STATE OF UTAH

(Separate report shall be filed for each well or tunnel)

GENERAL INFORMATION:

Report of well or **tunnel driller is hereby made** and filed with the State Engineer, in compliance with Sec. 100-3-22, **Utah Code Annotated**, 1943. **(This report shall be filed with the State Engineer within 30 days after the completion or abandonment** of well or tunnel. Failure to file such report constitutes a **misdemeanor.)**

1. Name and address **of person, ~~company or corporation boring or~~** drilling well **~~or tunnel.~~** (Strike words not needed)
   Harold Driscoll Box 128 Ft. Duchesne, Utah
2. Name and address of **~~owner of~~** well **~~or tunnel~~** United States of America, Dinosaur National Monument, Jensen, Utah (Strike Words not needed)
3. Source of supply is in Uintah County; ..... (Leave blank) drainage area; ..... (Leave blank) artesian basin
4. The number of approved application to appropriate water is 13209
5. Location of well **~~or mouth of tunnel~~** is situated at a point NE¼ of the SW¼ of Sec. Sect 26, TWP. 4 S.M. R. 23 E Salt Lake Meridian, 412 Ft. S 21° E of the north west Cor. of the above Described 40 acre tract (Describe by rectangular co-ordinates or by one course and distance with reference to U. S. Government Survey Corner — Copy description from well owner's approved application)
6. Date on which work on well **~~or tunnel was~~** begun Nov 5, 1951 (Strike words not needed)
7. Date on which work on well **~~or tunnel~~** was completed **~~or abandoned~~** Dec 12, 1951 (Strike words not needed)
8. Maximum quantity of water measured as **~~flowing, pumped~~** or Bailer test (Strike words not needed) on completion of well **~~or tunnel in sec. ft.~~** .....; or in gals. per minute 10 gal. Date Dec 16, 1952

DETAIL OF COLLECTING WORKS:

9. **WELL:** It is **drilled, ~~dug, flowing or~~** pump well. Temperature of water ..... °F. (Strike words not needed)
   (a) Total depth **of well is** 168 ft. below ground surface.
   (b) If flowing **well, give water** pressure (hydrostatic head) above ground surface ..... ft.
   (c) If pump well, give depth from ground surface to water surface before pumping .....
   Water Comes to 44 ft of Tub; during pumping Draw Down of 8 ft. was held from 80 gpm Fair
   (d) Size and kind of casing 8" + 6" I.D. Casing (If only partially cased, give details)
   (e) Depth to water-bearing stratum 162 ft. (If more than one stratum, give depth to each)
   (f) If casing is perforated, give depth from ground surface to perforations .....
   (g) Log of well 0 to 22 ft Top Soil Coarse Sand, with some Gravel 22 ft to 58 ft Soft Sand Rock, 58 ft to 63 ft Lime Stone From 63 ft to 162 ft Blue Sand rock, 162 ft to 164 ft Water bearing Sand, 164 ft to 166 Sand rock, 166 to 168 ft Blue Shale
   (h) Well was equipped with cap, valve, or Capped till Pump is installed (Strike words not needed) to control flow.

(Over)

10. TUNNEL: It is timbered, tiled, piped, open, bulkheaded, covered or.....
(Strike words not needed)

(a) Dimensions.....; total length.....; temperature of water.....°F.

(b) Position of water bearing stratum or strata with reference to mouth of tunnel.....

(c) Log of tunnel.....

11. GENERAL REMARKS: (Note any general or detailed information not covered above).

Set 40 ft 8 inch Casing to shut out the surface water, the formation is soft and ~~broken~~ broken so that the surface water still came in, Drilled ~~Ended~~ 23 ft of 8" hole and drove 6" casing to shut out surface water, the remainder is open hole and is solid enough that it will not cave in

RECEIVED
JUL 2 1952
STATE ENGINEER
COUNTER

STATE OF UTAH,
COUNTY OF Salt Lake } ss.

I, Garnett Bischoff, being first duly sworn, do hereby certify that I am the driller of the aforesaid well or tunnel who furnished the foregoing statement of facts; that I have read said statement and each and all of the items therein contained are true to the best of my knowledge and belief.

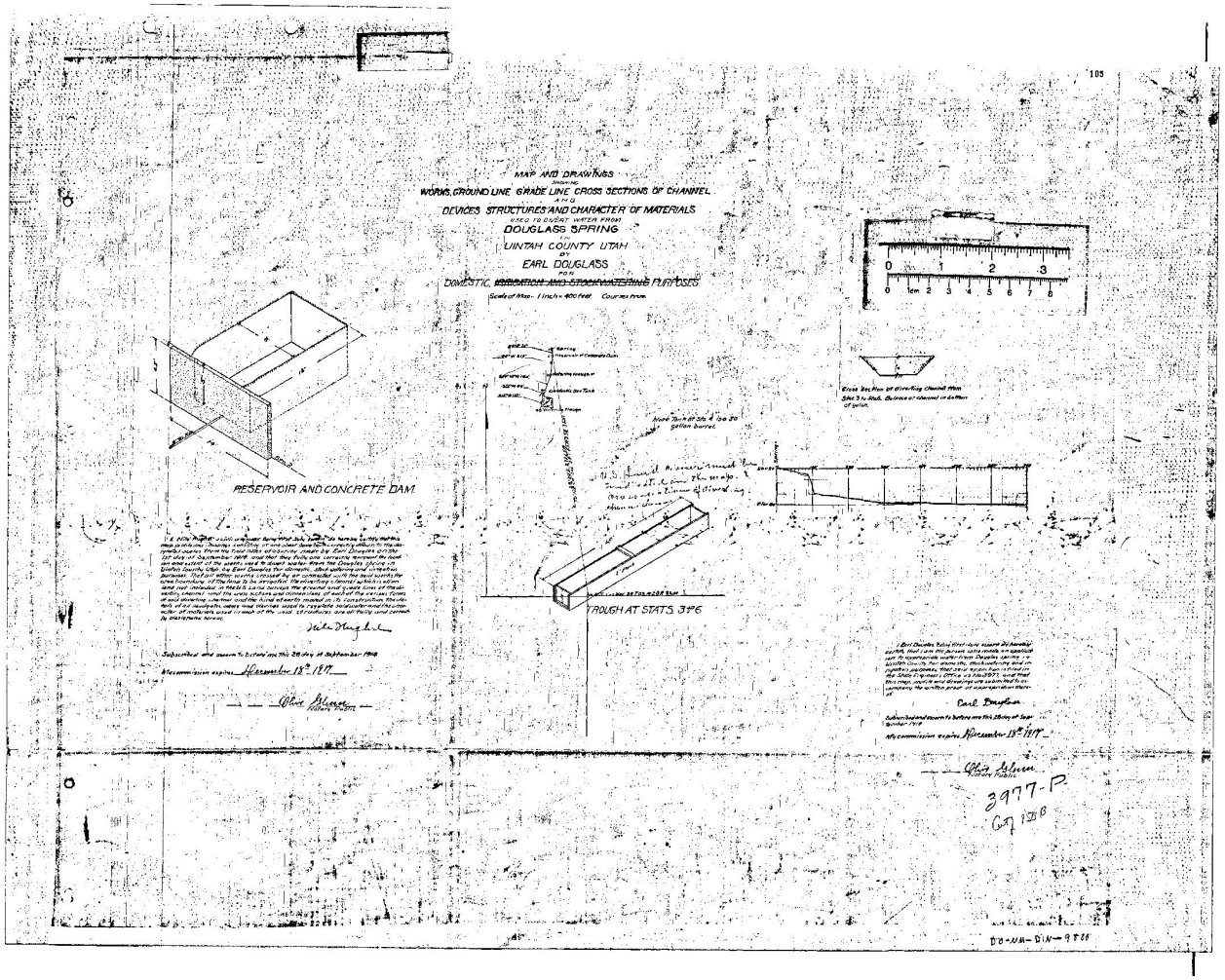
Garnett Bischoff
Driller

Subscribed and sworn to before me this 4 day of June, 1952.

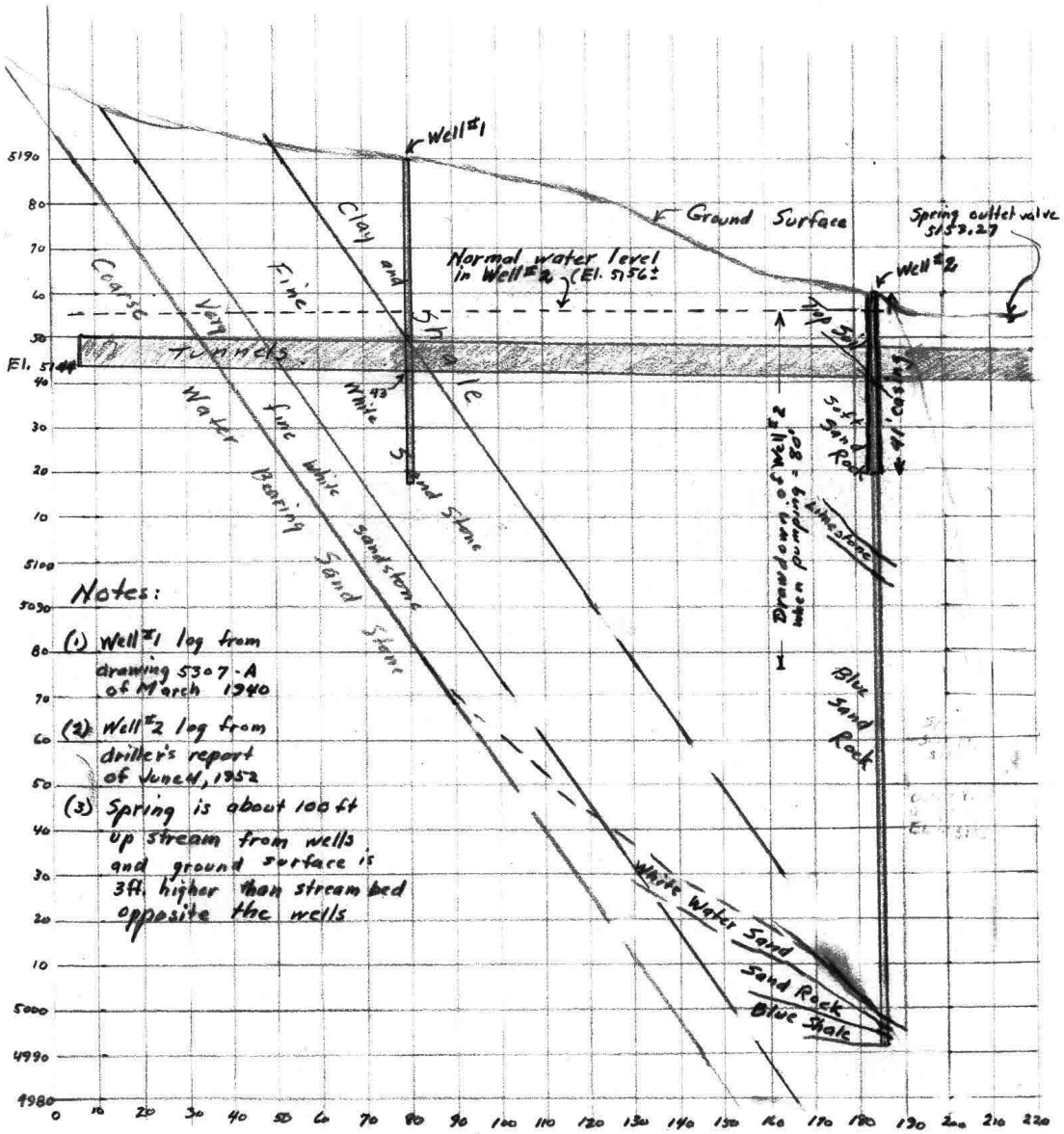
Betty B. Baugh
Notary Public

(SEAL)

My Commission Expires:
May 10, 1953



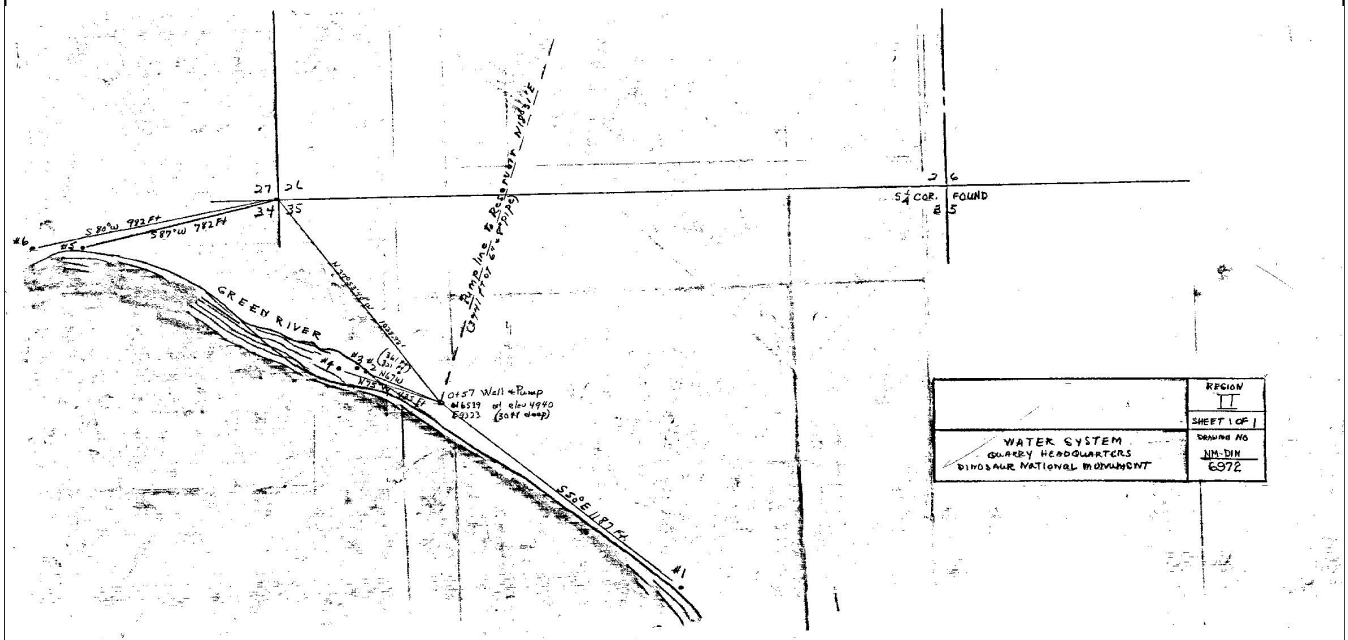
Maps and Miscellaneous Information



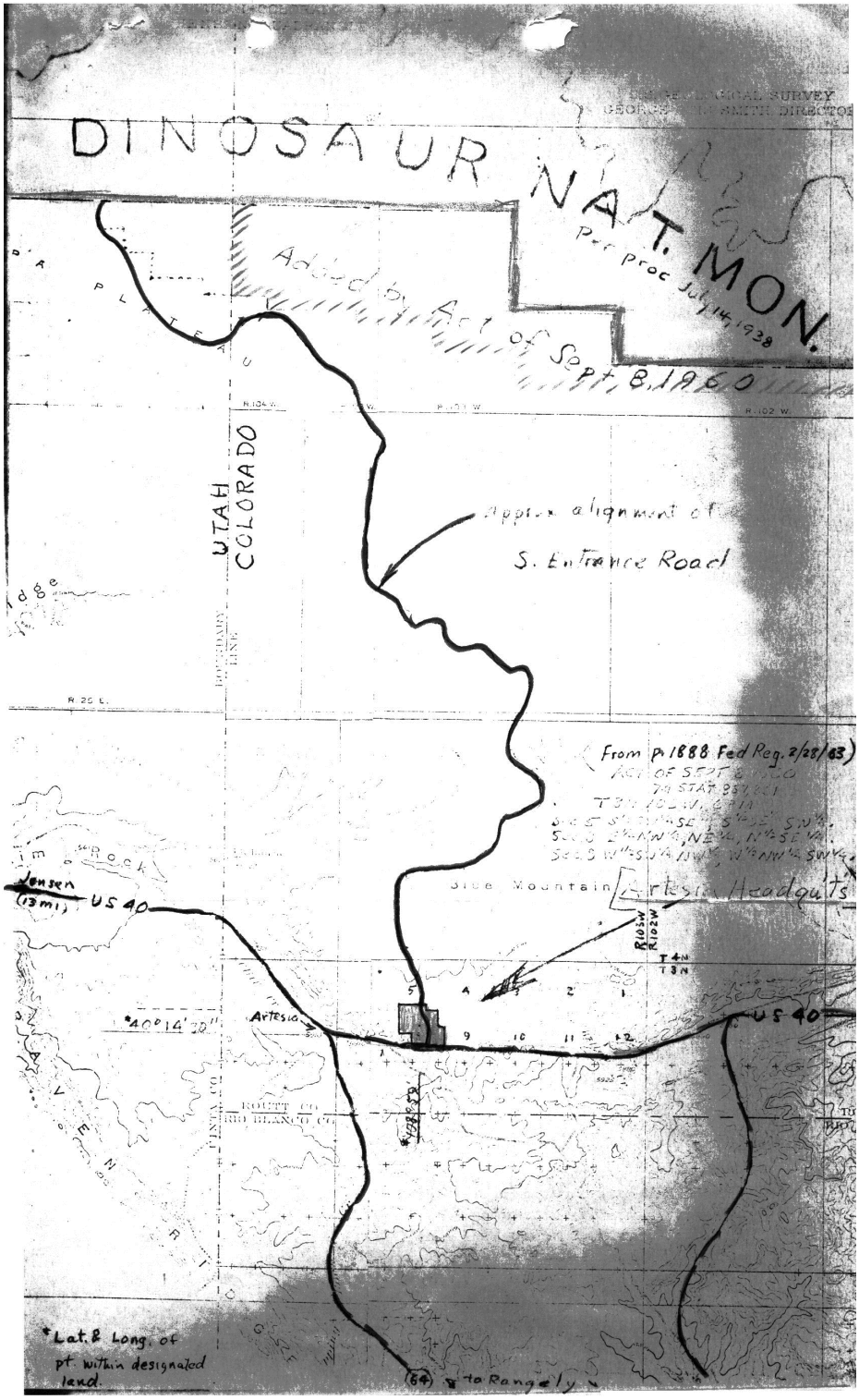
Section AA* through Wells 1 & 2
Dinosaur National Monument
Scale: 1" = 30'

by A. van V. Dunn
7/6/55

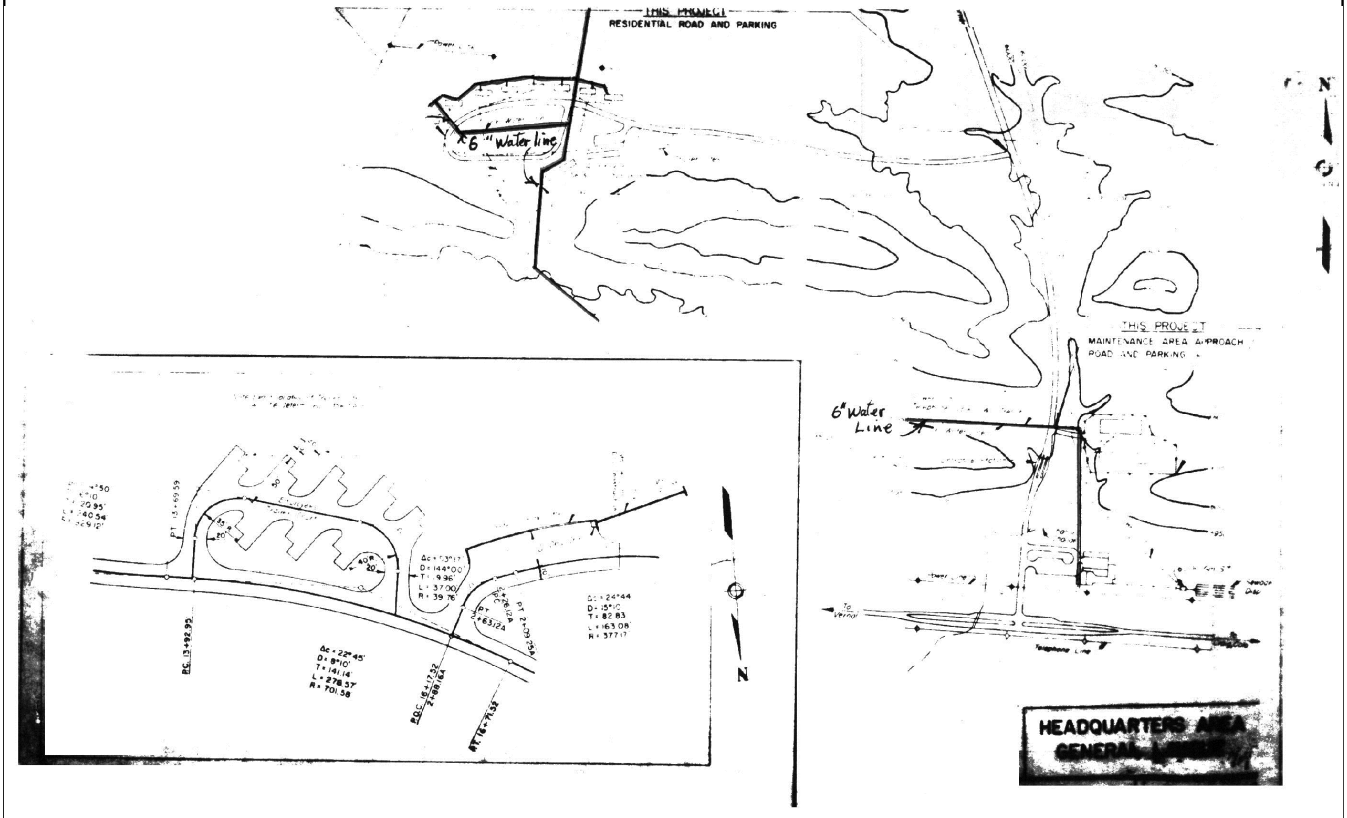
*See Dwg NM-DIN/6972, interim print of July '55

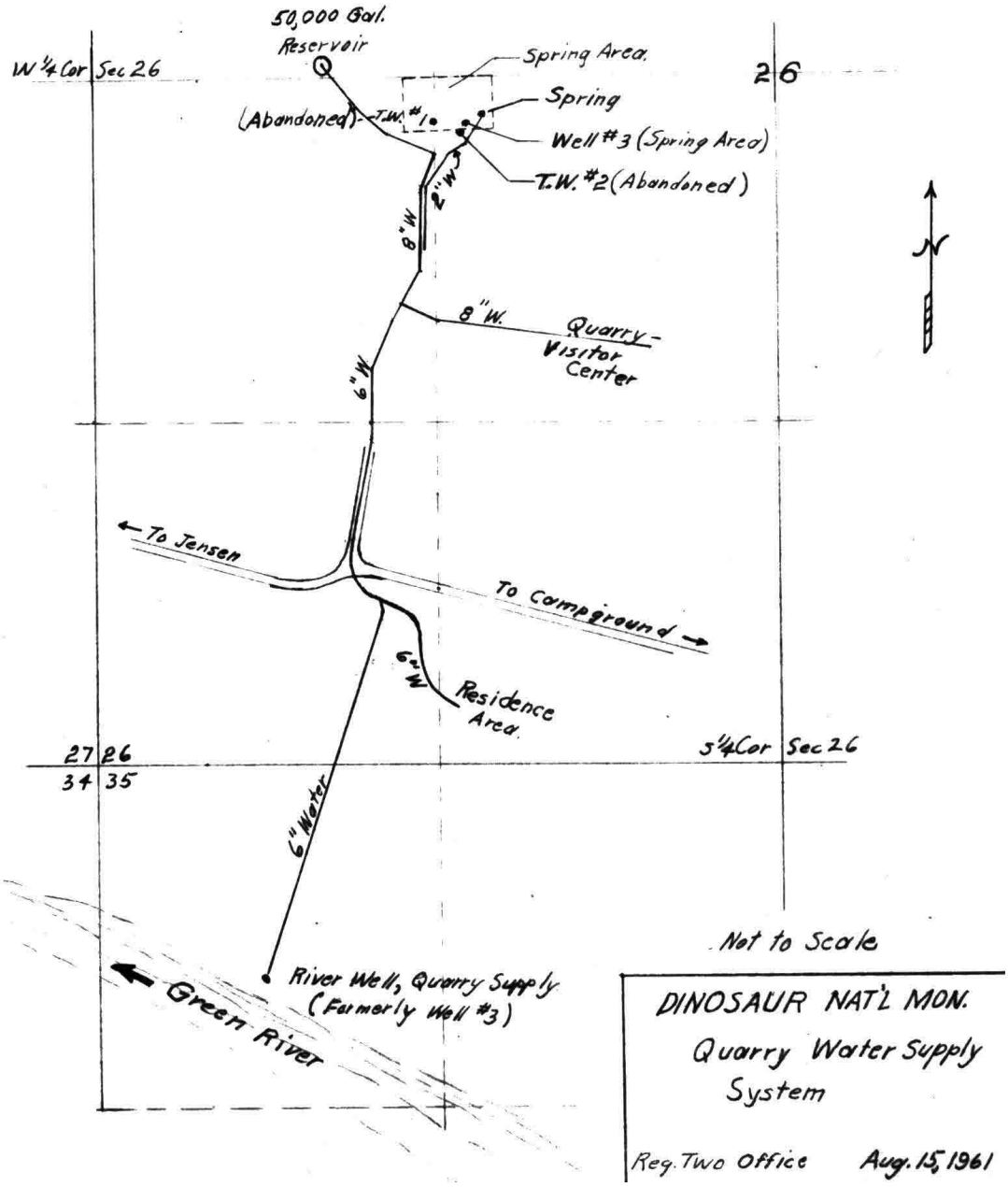

27
34
35
S 89°W 792 Ft
S 89°W 792 Ft
#6
#5
GREEN RIVER
Pump line 6" Asbestos cement pipeline
10457 Well & Pump
N16539 W 4190 4990
E9323 (30 HP Deep)
S 22°E 1187 Ft
#1
S¼ COR.
FOUND
REGION
II
SHEET 1 OF 1
WATER SYSTEM
QUARRY HEADQUARTERS
DINOSAUR NATIONAL MONUMENT
DRAWING NO
NM-DIN
6972

00-00-0000: map of dino area

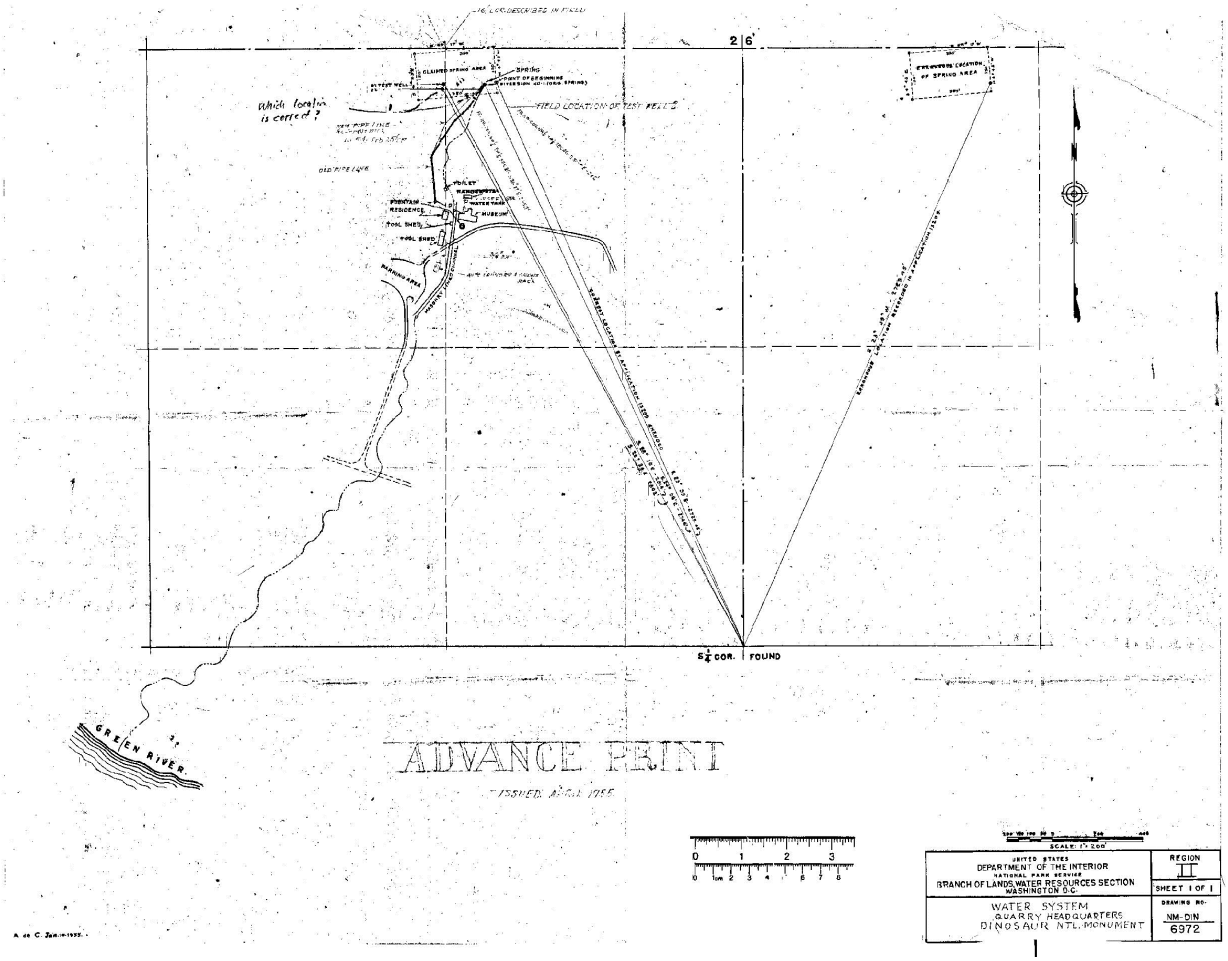


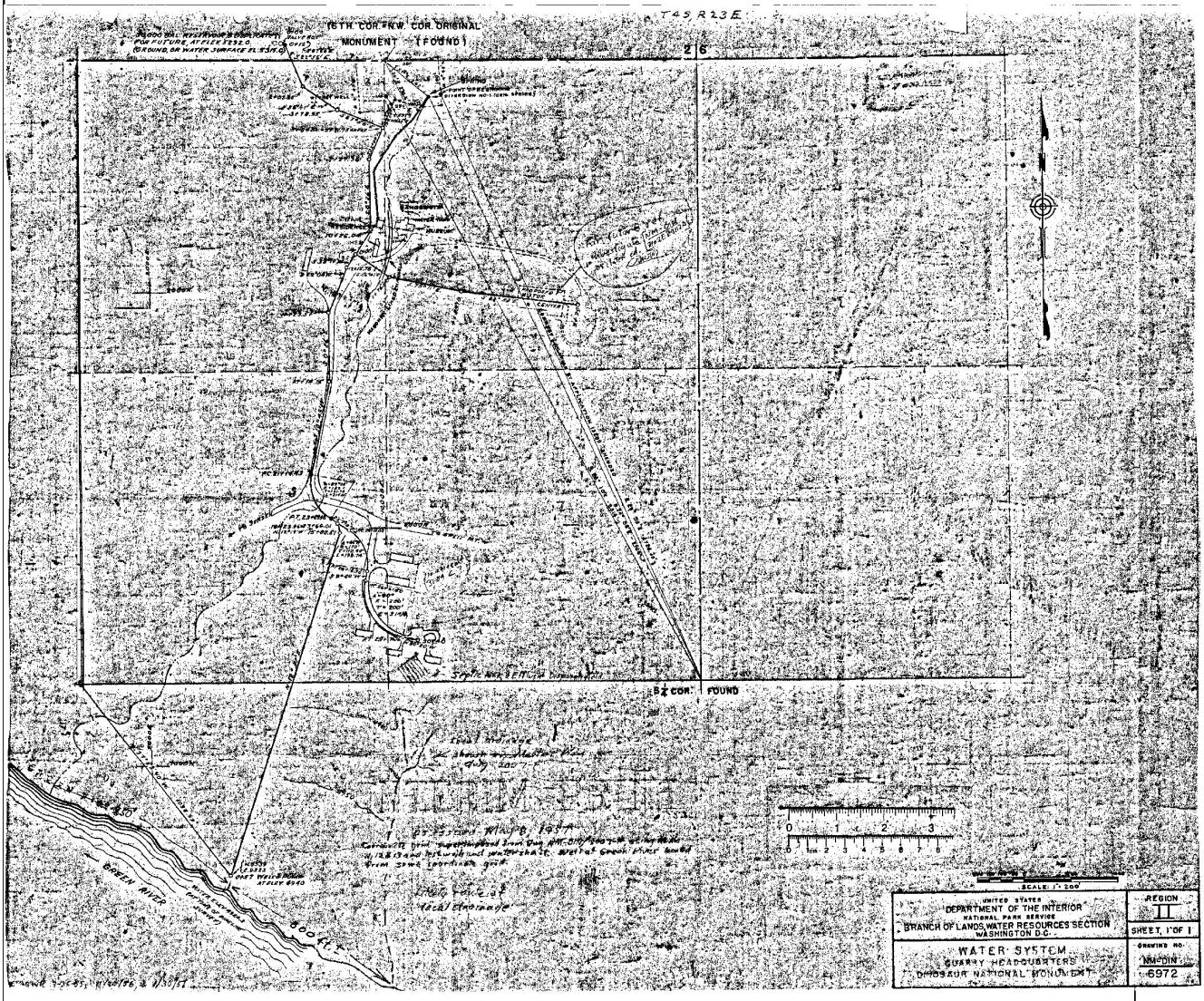
00-00-0000: map of parking




50,000 Gal.
Reservoir
W ¼ Cor Sec 26
Spring Area
26
Spring
(Abandoned) T.W. #1
Well #3 (Spring Area)
T.W. #2 (Abandoned)
2" W.
8" W.
8" W.
Quarry-
Visitor
Center
6" W.
To Jensen
To Campground
6" W.
Residence
Area
27 26
34 35
S ¼ Cor Sec 26
6" Water
River Well, Quarry Supply
(Formerly Well #3)
Green River
Not to Scale
DINOSAUR NAT'L MON.
Quarry Water Supply
System
Reg. Two Office
Aug. 15, 1961

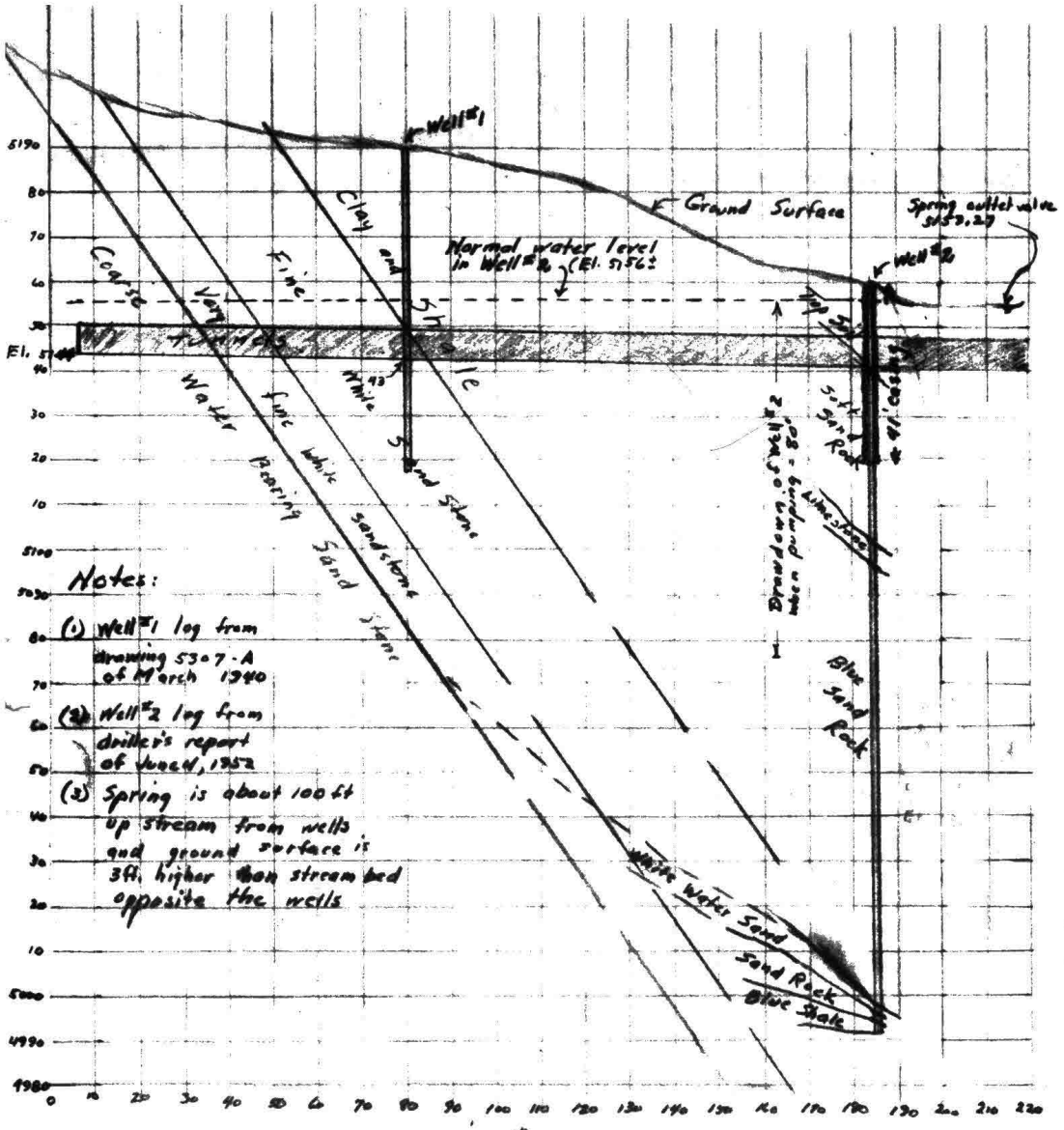
00-00-0000: water system - quarry headquarters




T 4S R 23 E
16TH COR. N.W. COR. ORIGINAL MONUMENT (FOUND)
2
6
3
11
1/4 COR. FOUND
GREEN RIVER
SCALE: 1" = 200'
UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
BRANCH OF LANDS, WATER RESOURCES SECTION
WASHINGTON D.C.
REGION
II
SHEET, 1 OF 1
WATER SYSTEM
QUARRY HEADQUARTERS
DINOSAUR NATIONAL MONUMENT
DRAWING NO.
6972

00-00-0000: well depth and geological description

Reg II

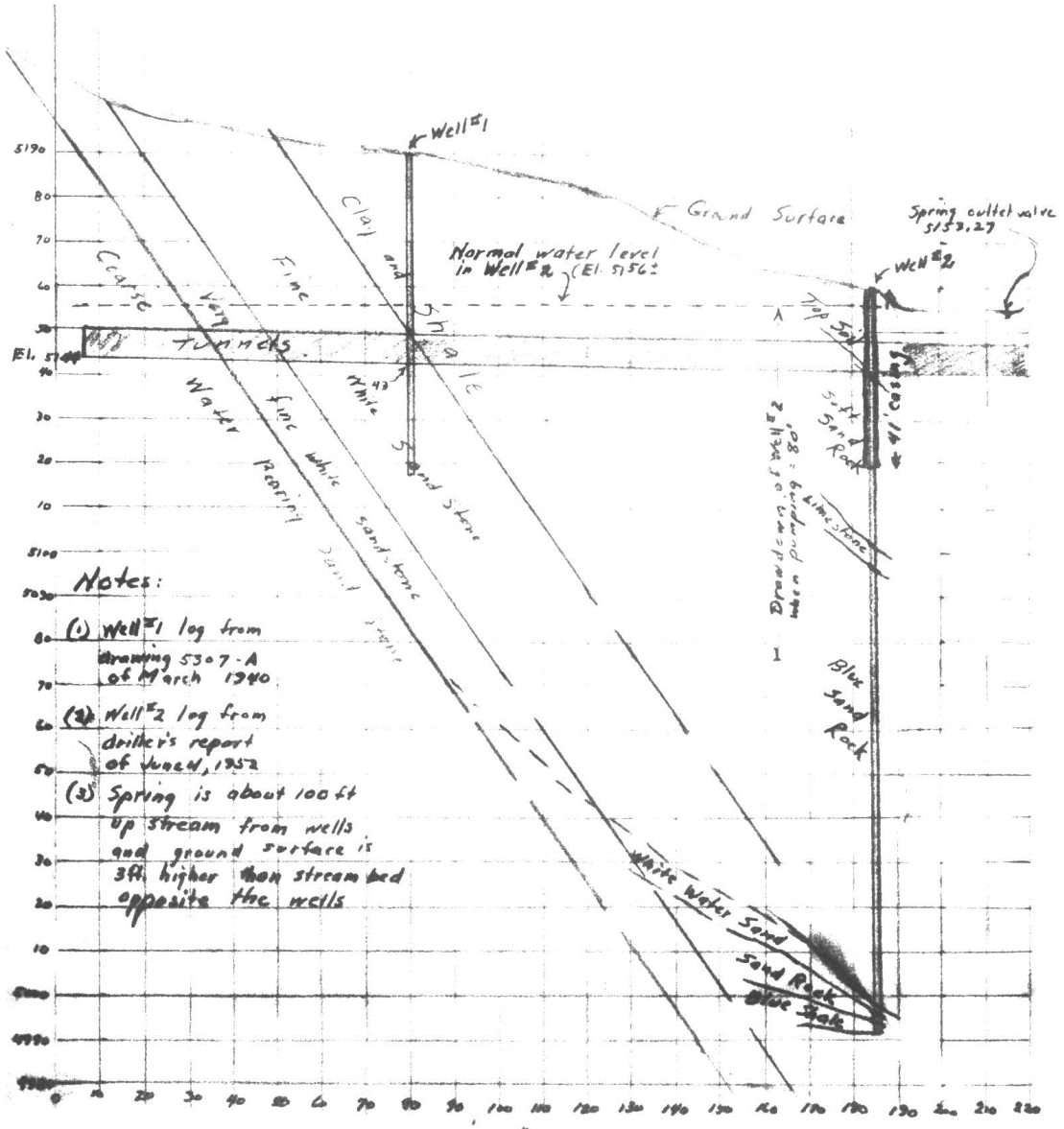


Section AA' through Wells 1 & 2
Dinosaur National Monument
Scale: 1" = 30'

Rec'd with DEC 9/58 memo from Dunn

by A. von V. Dunn 7/6/55 *See Dwg NM-DIN 6472, interim print of July '55

00-00-0000: well depth and geological description repeated

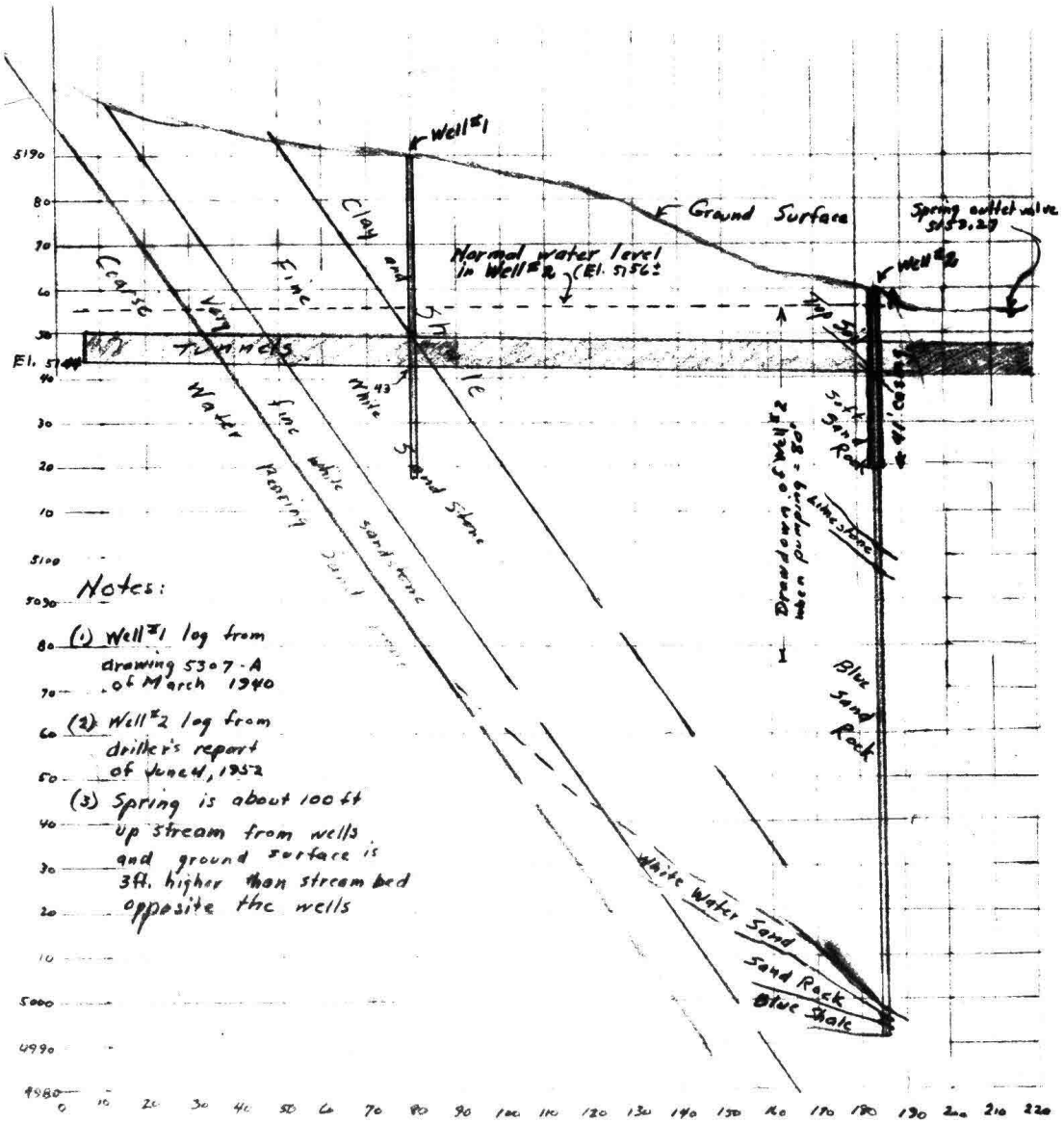


Section AA* through Wells 1 & 2
Dinosaur National Monument
Scale: 1" = 30'

by A. Lee V. Dunn
*See Dwg NM-DIN/6972, interim print of July '55

00-00-0000: well depth and geological description repeated

Dinosaur



Notes:

(1) Well #1 log from drawing 5307-A of March 1940

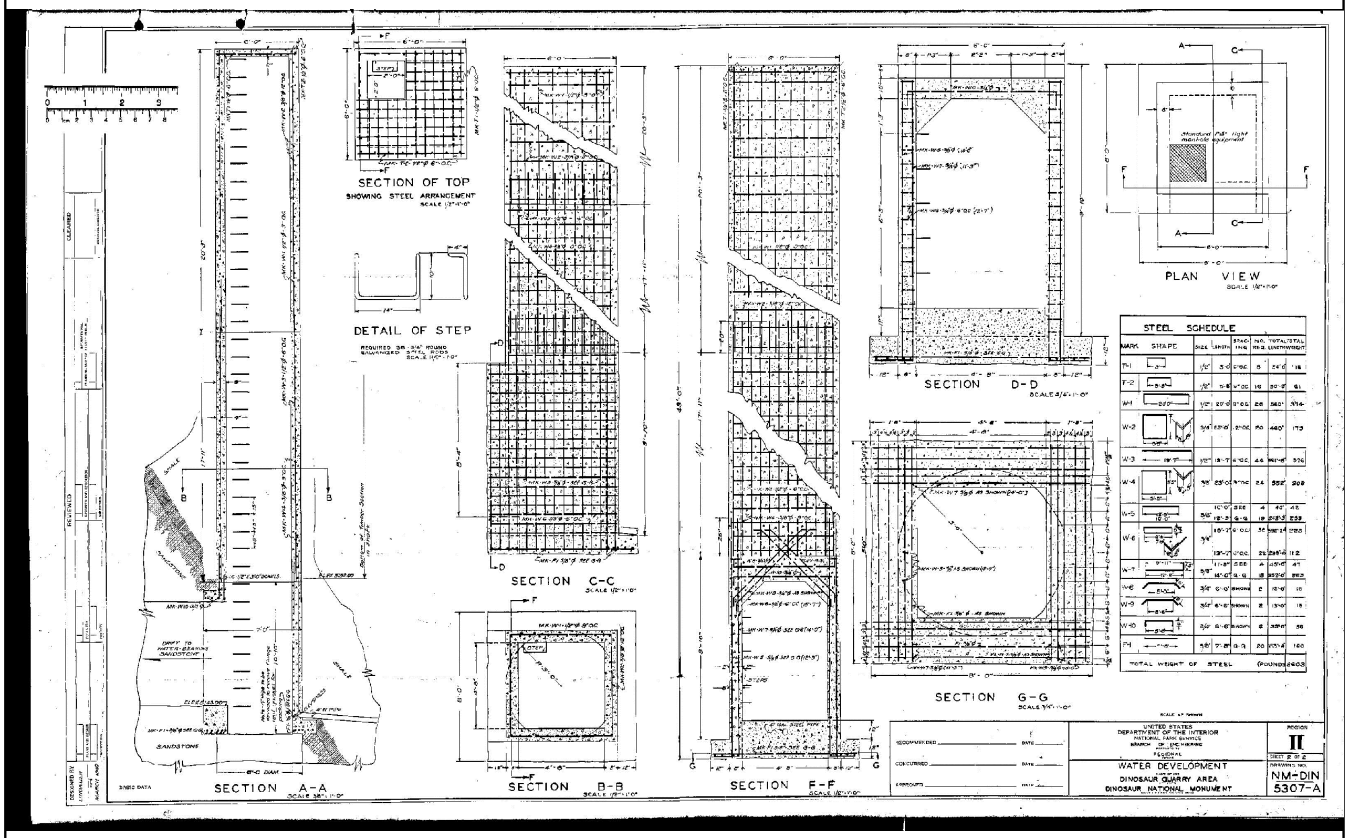
(2) Well #2 log from driller's report of June 4, 1952

(3) Spring is about 100 ft up stream from wells and ground surface is 3ft. higher than stream bed opposite the wells

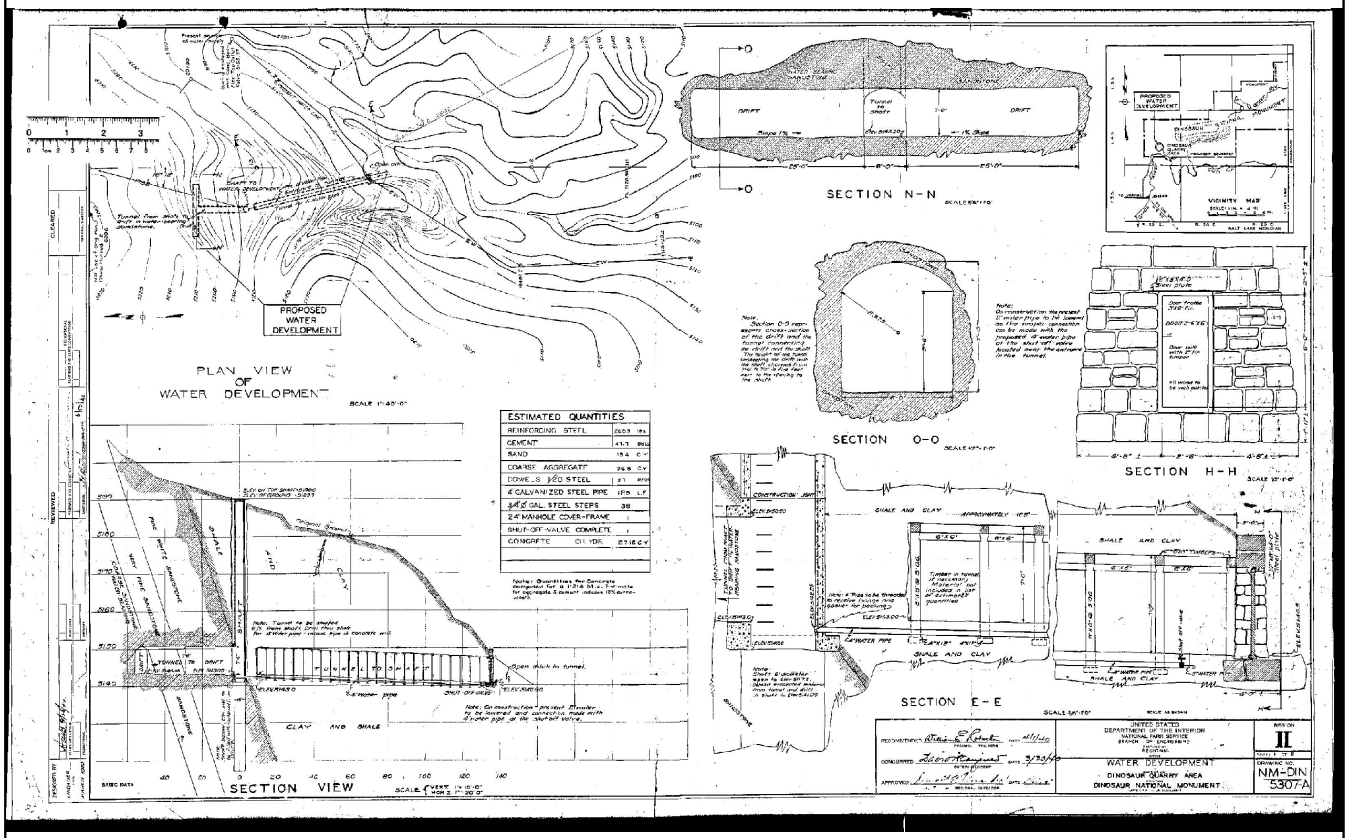
Section AA* through Wells 1 & 2
Dinosaur National Monument
Scale: 1" = 30'

by A. van V. Dunn
7/6/55

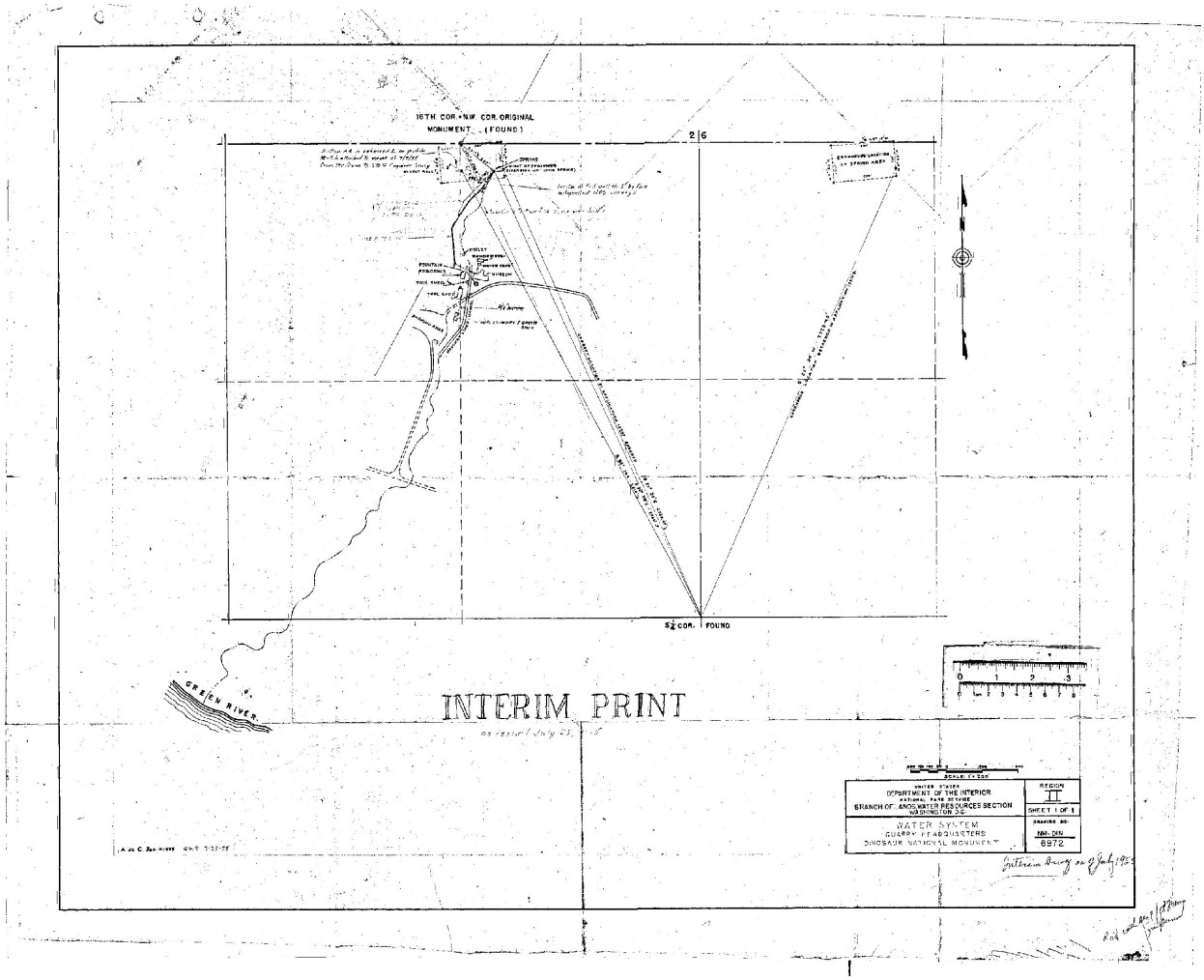
*, Yo, HM-DIN 6472, Interim print of July '55

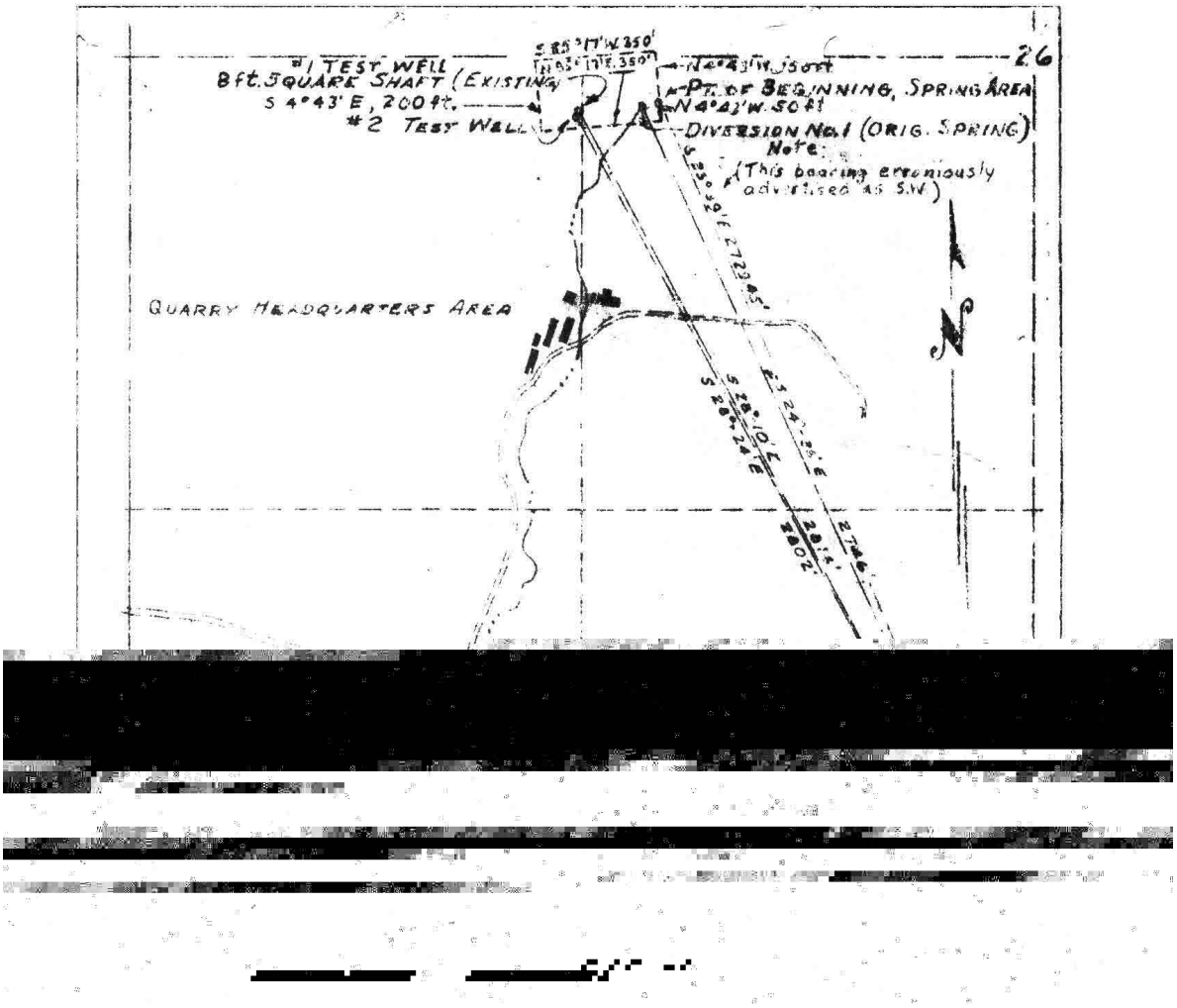

SECTION OF TOP
SHOWING STEEL ARRANGEMENT
DETAIL OF STEP
SECTION A-A
SECTION B-B
SECTION C-C
SECTION D-D
SECTION F-F
SECTION G-G
PLAN VIEW
STEEL SCHEDULE
WATER DEVELOPMENT
DINOSAUR QUARRY AREA
DINOSAUR NATIONAL MONUMENT
NM-DIN
5307-A

03-30-1940: construction plans - water step

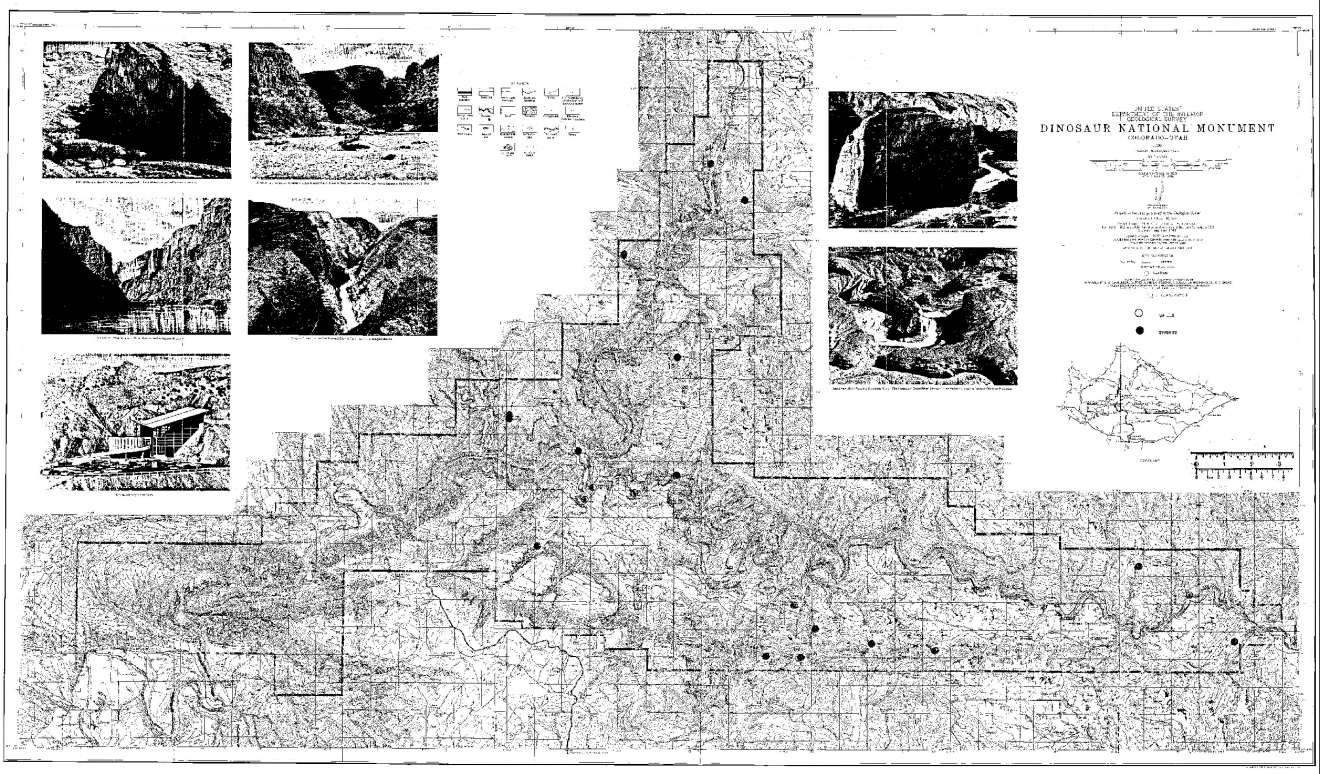


07-00-1955: water system - quarry headquarters




#1 TEST WELL
8 ft. SQUARE SHAFT (EXISTING)
S 4°43' E, 200 ft.
#2 TEST WELL
N 4°43' W. 350 ft.
PT. OF BEGINNING, SPRING AREA
N 4°43' W. 50 ft.
DIVERSION No. 1 (ORIG. SPRING)
Note:
(This bearing erroneously advertised as S.W.)
QUARRY HEADQUARTERS AREA
N
26

00-00-1956: topographic map of dino and spring and well locations



Docket Information

Number of Documents in Docket 222

Documents Dated from 12/18/1917 to 9/12/1963

Docket Compiled: 5/31/2016