

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE STATE OF IDAHO,
IN AND FOR THE COUNTY OF TWIN FALLS

IN RE THE GENERAL ADJUDICATION
OF RIGHTS TO THE USE OF WATER FROM
THE SNAKE RIVER BASIN WATER SYSTEM.

CIVIL CASE NUMBER: 39576

Ident. Number: A36-04203
Date Received: 5/30/1989
Receipt No: C007120
Received By: _____

NOTICE OF CLAIM TO A WATER RIGHT
ACQUIRED UNDER STATE LAW

1. Name: UNION PACIFIC RAILROAD COMPANY 402-271-3728
Address: 1416 DODGE STREET
OMAHA, NE 68179

2. Date of Priority: SEP 13, 1957

3. Source: GROUNDWATER Trib. to:

4. Point of Diversion:

Township	Range	Section	1/4 of	1/4 of	1/4	Lot	County
08S	25E	1	NW	SW			MINIDOKA

5. Description of diverting works:
14" X 390' DEEP WELL, 15 HP PUMP, 350,000 GAL. STEEL STORAGE TANK

6. Water is used for the following purposes:

Purpose	From	To	C.F.S	(or)	A.F.A.
MUNICIPAL	01/01	12/31	0.220		

7. Total Quantity Appropriated is:
0.220 C.F.S. (and/or) A.F.A.

8. Total consumptive use is Acre Feet Per Annum.

9. Non-irrigation uses:
SEE REMARKS

10. Place of Use:

Township	Range	Section	1/4 of	1/4	Lot	Use	Acres
08S	25E	1	NW	SW		MUNI	
		2	NE	SE		MUNI	

11. Place of use in counties: MINIDOKA

A36-04203

Page 1

Date: 07/21/89

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12. Do you own the property listed above as place of use? YES

13. Other Water Rights Used:
NONE

14. Remarks:

ALL WATER FACILITIES WERE DONATED TO THE CITY OF MINIDOKA EXCEPT THE WELL. FACILITIES AND WELL ON THE RIGHT-OF-WAY ARE COVERED BY A LEASE AGREEMENT WITH THE CITY AND MADE A PART OF THE CITY'S MUNICIPAL WATER SYSTEM. WATER IS ALSO USED IN OUR DEPOT BLDG. AND SECTION HOUSES.

WATER USE CHANGED FORM STEAM ENGINE AND STATION USE TO STATION, DOMESTIC AND MUNICIPAL USE ON APRILL 11, 1957.

15. Basis of Claim: STATUTORY CLAIM

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16. Signature(s)

(a.) By signing below, I/We acknowledge that I/We have received, read and understand the form entitled "How you will receive notice in the Snake River Basin Adjudication." (b.) I/We do _____ do not _____ wish to receive and pay a small annual fee for monthly copies of the docket sheet.

Number of attachments: _____

For Organizations:

I do solemnly swear or affirm that I am _____ of
_____, Title
_____, that I have signed the foregoing
Organization
document in the space below as _____ of
_____, Title
_____ and that the statements contained in the
Organization
foregoing document are true and correct.

Signature of Authorized Agent

Title and Organization

Date

State of Idaho)
County of _____) SS.

Subscribed and sworn (or affirmed) before me this _____ day
of _____ 19 _____

Notary Public

Seal

Residing at _____

My Commission Expires _____

IN THE DISTRICT COURT OF THE FIFTH JUDICIAL DISTRICT OF THE
STATE OF IDAHO, IN AND FOR THE COUNTY OF TWIN FALLS

**IN RE THE GENERAL ADJUDICATION
OF RIGHTS TO THE USE OF WATER FROM
THE SNAKE RIVER BASIN WATER SYSTEM**

CIVIL CASE NUMBER: 39356

Ident. Number 36-4203

Date Received

Receipt Number

C007120

**NOTICE OF CLAIM
TO A
WATER RIGHT
ACQUIRED UNDER STATE LAW**

RECEIVED
MAY 20 1989

Department of Water Resources

Please type or print clearly

1. Name of Claimant (s) Union Pacific Railroad Company Phone (402) 271-3728
Mailing Address 1416 Dodge Street, Omaha, Nebraska Zip 68179

2. Date of Priority (Only one (1) per claim) September 13, 1957

3. Source of water supply (a) groundwater
which is tributary to (b) _____

4. a. Location of existing point of diversion is: Township 8 S. Range 25 E. Section 1,
NW 1/4 of SW 1/4 of _____ 1/4, Govt. Lot, _____ B.M., County of Minidoka

Additional points of diversion if any: _____

b. If instream flow, beginning point of claimed instream flow is:

Township _____ Range _____ Section _____, _____ 1/4 of _____ 1/4 of _____ 1/4,
Govt. Lot _____ B.M., County of _____
ending point is: Township _____ Range _____ Section _____, _____ 1/4 of _____ 1/4 of
_____ 1/4, Govt. Lot _____ B.M., County of _____

5. Description of existing diversion works (Dams, Reservoirs, Ditches, Wells, Pumps, Pipelines, Headgates, Etc),
including the dates of any changes or enlargements in use, the dimensions of the diversion works as
constructed and as enlarged and the depth of each well.

14"x390' deep well with 15 HP elec. pump and connected to 350,000 gallon steel storage
tank, changed from steam engine and station use to station, domestic and municipal
use on April 11, 1957.

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6. Water is claimed for the following purposes:

(both dates are inclusive)

(cfs)

(acre feet)

For Municipal purposes from 1-1 to 12-31 amount 0.22 or _____
For _____ purposes from _____ to _____ amount _____ or _____
For _____ purposes from _____ to _____ amount _____ or _____
For _____ purposes from _____ to _____ amount _____ or _____

7. Total quantity claimed (a) 0.22 (cfs) and/or (b) _____ (acre feet)

8. Total consumptive use claimed is _____ acre feet per annum.

9. Non-irrigation uses; describe fully (eg. Domestic: Give number of households served; Stockwater: Type and number of livestock Etc.) _____

10. Description of place of use:

- If water is for irrigation, indicate acreage in each subdivision in the tabulation below.
- If water is used for other purposes, place a symbol of use (example: D for Domestic) in the corresponding place of use below. See instructions for standard symbols.

TWP	RNG	SEC	NE 1/4				NW 1/4				SW 1/4				SE 1/4				Totals
			NE1/4	NW1/4	SW1/4	SE1/4	NE1/4	NW1/4	SW1/4	SE1/4	NE1/4	NW1/4	SW1/4	SE1/4	NE1/4	NW1/4	SW1/4	SE1/4	
8 S.	25 E.	1										M							
8 S.	25 E.	2													M				

Total number of acres irrigated _____

11. In which county (ies) are lands listed above as place of use located? Minidoka

12. Do you own the property listed above as place of use? Yes X No _____
If your answer is No, describe in Remarks below the authority you have to claim this water right.

13. Describe any other water rights used at the same place and for the same purposes as described above.
_____ or None (X)

14. Remarks:

All water facilities were donated to the City of Minidoka except the well.
Facilities and well on the right-of-way are covered by a Lease Agreement
with the City and made a part of the City's Municipal Water System. Water
is also used in our Depot Bldg. and Section Houses

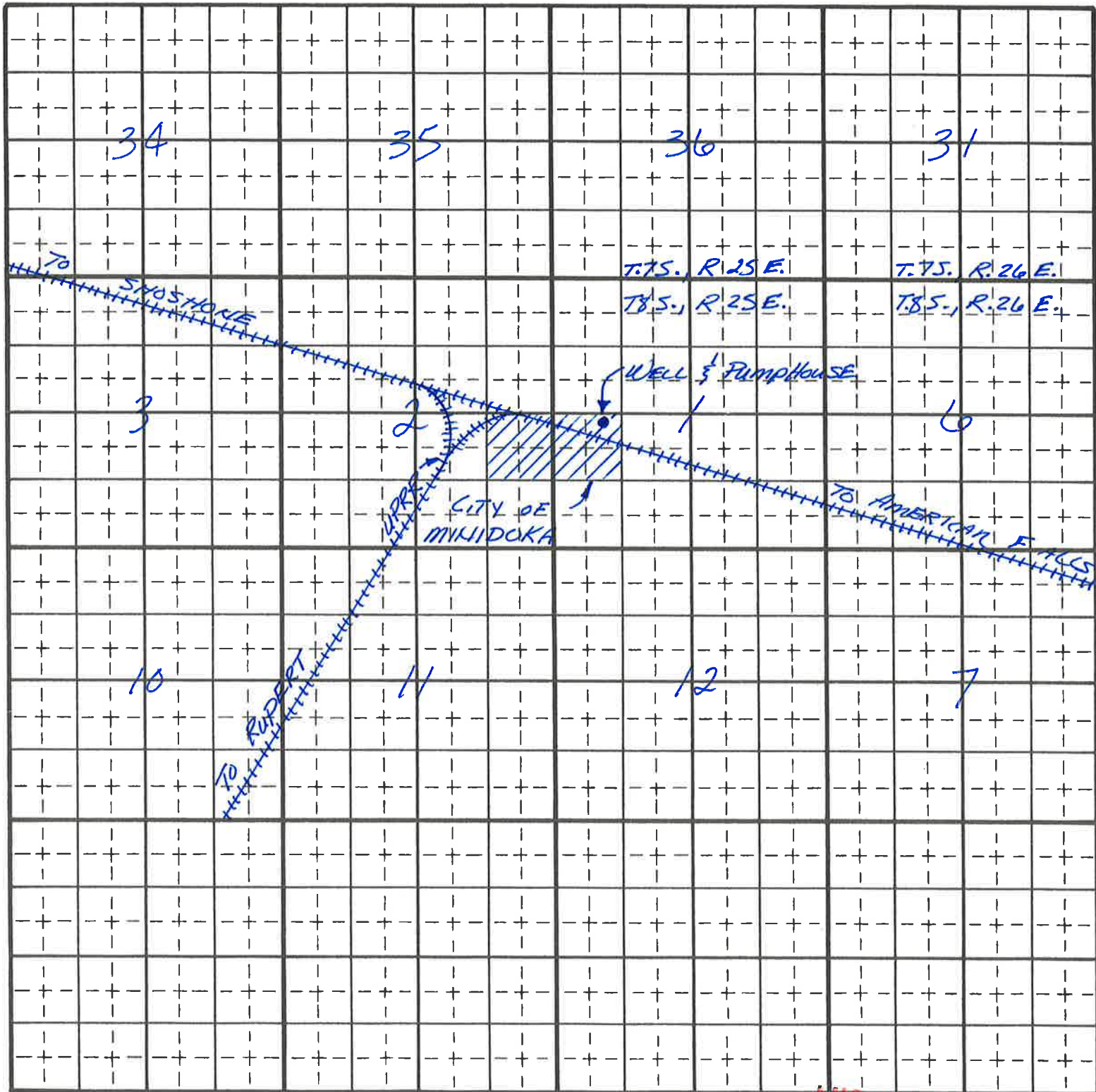
MICROFILMED
FEB 01 1993

Last Name Union Pacific Ident No. 36-4203

Copies: White -State, Yellow-Claimant

Map of Project: show clearly the point of diversion, place of use, section number, township, and range number.

Scale: 2 inches equals 1 mile



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FEB 01 1993

Last Name Union Pacific

Ident No. 36-4203

Copies: White-State, Yellow-Claimant

15. Basis of Claim (check one) Ben. Use ☒ Posted Notice ☐ License ☐ Permit ☐
Decree ☐
If applicable provide IDWR Water Right Number 36-4203
Court _____ Case Number _____ Decree Date _____
Plaintiff vs Defendant _____

16. Signature (s)

(a.) By signing below, I/We acknowledge that I/We have received, read, and understand the form entitled "How you will receive notice in the Snake River Basin Adjudication." (b.) I/We do ☐ do not ☒ wish to receive and pay a small annual fee for monthly copies of the docket sheet.

Number of attachments _____

For Individuals: I do solemnly swear or affirm that the statements contained in the foregoing document are true and correct.

Signature of Claimant (s) _____ Date _____
_____ Date _____

For Organizations: I do solemnly swear or affirm that I am Chief Engineer - Design
Title
of Union Pacific Railroad Company, that I have signed the foregoing
Organization
document in the space below as Chief Engineer - Design of UPRR Co.
Title Organization
and that the statements contained in the foregoing document are true and correct.

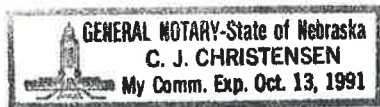
Signature of Authorized Agent J.R. Bevan

Title and Organization Chief Engineer - Design/UPRR Co. Date 5/25/89

State of Idaho/or Nebraska)
County of Douglas) SS.

Subscribed and sworn (or affirmed) before me this 25th day of May 19 89

SEAL



Notary Public C. J. Christensen

Residing at Omaha, Nebraska

My Commission Expires Oct. 13, 1991

Please Print Name

17. Notice of Appearance:

Notice is hereby given that I, _____ will be acting as attorney at law on behalf of the claimant signing above, and that all notices required by law to be mailed by the director to the claimant signing above should be mailed to me at the address listed below.

Signature _____

Address _____

Date _____

MICROFILMED
FEB 01 1993

Last Name Union Pacific Ident. Number 36-4203

Copies White-State, Yellow-Claimant

UNION PACIFIC RAILROAD COMPANY

ENGINEERING DEPARTMENT



S. J. McLAUGHLIN,
Assistant Vice President
Engineering
(402) 271-3018

Room 920
1416 Dodge Street
Omaha, Nebraska 68179

C. D. Barton
Chief Engineer-Maintenance
(402) 271-3792
C. L. Jensen
Chief Engineer-Programs
(402) 271-5573
J. R. Beran
Chief Engineer-Design
(402) 271-3029
P. M. Abaray
Chief Engineer-Signals
(402) 271-3036

May 25, 1989

Drainage & Water:
Idaho: Water Supply

RECEIVED
MAY 30 1989

Mr. Forrest E. Luthy
Idaho Department of Water Resources
Adjudication Bureau
Statehouse Mail
Boise, Idaho 83720

Department of Water Resources

Dear Mr. Luthy:

In connection with the Snake River Basin water rights adjudication, enclosed please find for filing seven (7) completed Water Rights Claim forms for water rights owned by Union Pacific Railroad Company in Bingham, Ada, Minidoka and Elmore Counties.

The enclosed claims are identified as follows:

(1)	Taber	-	35-4161
(2)	Fort Hall	-	29-4332
(3)	Orchard	-	61-4074
(4)	Minidoka #3	-	36-4203
(5)	Minidoka #2	-	36-4204
(6)	King Hill	-	61-4075
(7)	Hammett	-	61-4076

Also, enclosed is Union Pacific Voucher No. 154031, made payable to the Idaho Department of Water Resources in the amount of \$415.00 to cover the associated filing fees. Please note that this amount is less the \$33.00 credit balance referenced in Mr. Donald V. Shaff's letter dated April 5, 1989, Receipt No. C006124. In conjunction with his letter, we do not wish to file the claim for water right 94-4182 furnished with my letter dated March 29, 1989; but would rather have the \$33.00 credit applied to the enclosed filings.

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FEB 01 1993

If I can be of further assistance to you, please feel free to contact Mr. Jack L. Nelson at (402) 271-2347.

Yours truly,

A handwritten signature in cursive script that reads "J. R. Beran". The signature is written in dark ink and is positioned above the printed name and title.

J. R. BERAN
Chief Engineer - Design

jln/c/0525i

MICROFILMED

FEB 01 1993

4/5/1989

SRBA CLAIMS RECEIVING CHECKLIST #2

CLAIMANT'S NAME Union Pacific CLAI DENT. NO. A36-04203
DATE RECEIVED 5-30-89 CK # 154031 AMOUNT \$ 415 ②

- | | YES | NO | Required Info? |
|--|-------------------------------------|--------------------------|----------------|
| 1. Is the name and address complete with zip code? | ☒ | ☐ | * |
| 2. Is a priority date entered?
Is the priority date acceptable in view of mandatory filing dates?
See Adjudication Memos #1 and #4 to determine if a Permit is required. | ☒ | ☐ | * |
| 3. (a) Is a source entered? | ☒ | ☐ | * |
| (b) Is a tributary to entered? (if required) | ☒ | ☐ | |
| 4. Is the legal description of the p.d. sufficient? | ☒ | ☐ | * |
| 5. Is there a description of the diverting works? | ☒ | ☐ | |
| 6. Are the water uses appropriate for the form? The short form is limited to domestic and stockwater uses with direct diversion. All claims that include storage or instream stockwater must use long form. | ☒ | ☐ | * |
| Is the period of use included? | ☒ | ☐ | |
| Is a quantity claimed for each use? | ☒ | ☐ | * |
| 7. Is a total quantity claimed entered? | ☒ | ☐ | |
| 8. If required is a consumptive use entered? | ☒ | ☐ | |
| Is the consumptive use correct? | ☒ | ☐ | |
| 9. Are the non-irrigation uses listed properly? If this claim is on the short form, and more than one domestic use is listed, single ownership must be stated. If not under single ownership, see Adjudication Memo # 4. | ☒ | ☐ | * |
| 10. Is (are) the place(s) of use and purpose(s) indicated? | ☒ | ☐ | * |
| 11. Is (are) the county(ies) entered? | ☒ | ☐ | |
| 12. Is the ownership of p.u. checked? | ☒ | ☐ | |
| 13. Are other water rights listed or "none" indicated? | ☒ | ☐ | |
| 14. If required, are remarks correct? (If the claimant does not own the place of use, authority for filing the claim must be explained in the remarks.) | ☒ | ☐ | |
| 15. Is the basis of the claim indicated? | ☒ | ☐ | |
| 16. If the claimant requested a monthly docket sheet, is payment enclosed? (If yes, describe payment status in "Comments" below.) | ☒ | ☐ | |
| 17. Is the claim signed by the claimant, and is the signature appropriate? Organizations must complete the organization block. | ☒ | ☐ | * |
| 18. Has the claim been signed, sealed, and dated by a notary? | ☒ | ☐ | * |
| 19. Was this claim filed on time, or was an extension granted? | ☒ | ☐ | * |
| 20. Is the fee enclosed correct? | ☒ | ☐ | * |
| 21. If this claim is based on an existing water right, has the identification number been entered? | ☒ | ☐ | |
| 22. Should this claim be data entered? | ☒ | ☐ | |

Claim checked by: CJ Date: 7-21-89
Claim must be returned to claimant: (Yes) (No)
Claimant must be notified of modifications: (Yes) (No)

Receipt Prepared by: Date:
Claim data entered by: CJ Date: 7-21-89 Checked by: Date:
Sent to claimant by: Date:

Comments:

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FEB 01 1993



State of Idaho

DEPARTMENT OF WATER RESOURCES

Southern Region, 222 Shoshone St. East, Twin Falls, Idaho 83301 (208) 734-3578

CECIL D. ANDRUS
Governor

R. KEITH HIGGINSON
Director

October 3, 1990

A36-04202
UNION PACIFIC RAILROAD CO.
1416 DODGE ST.

OMAHA

NE 68179

Dear Claimant(s):

In the past you submitted the claim(s) identified with the number(s) shown above your name and address at the top of this letter. You indicated on the claim(s) that the basis for establishing the water right(s) was Beneficial Use, meaning the water right was not previously confirmed by a decree, water right license or permit before you filed the claim(s).

The purpose of this letter is to request evidence supporting the priority date(s) you have claimed. The enclosed pamphlet describes what this means. While I encourage you to read all of the pamphlet, I direct your attention to the right-hand half of the pamphlet after you open it. There you will find two sections: What Kind of Evidence is Required, and Some Examples of Documents which May Be Evidence of the Priority Date. These sections tell you what must be submitted. The other sections tell you why the evidence is necessary and what the consequences of not submitting the evidence could be.

Please submit the requested evidence by November 1, 1990. When returning to the Department please reference all documents with the claim(s) identification number(s) listed above.

If you have questions not addressed by the pamphlet or need other technical assistance, please feel free to contact this office. For advice on your water right(s), please contact your attorney.

Sincerely,

Allen Merritt, P.E.
Water Rights Supervisor

Enclosure

MICROFILMED
FEB 01 1993

UNION PACIFIC RAILROAD COMPANY

ENGINEERING DEPARTMENT



S. J. McLAUGHLIN,
Vice President-Engineering
Room 1200
(402) 271-3018

Mailing Address:
Room 920
1416 Dodge Street
Omaha, Nebraska 68179

November 16, 1990

Drain & Waterway: Idaho
Water Source

C. D. Barton
Chief Engineer-M/W East
(402) 271-3792
C. L. Jensen
Chief Engineer-M/W West
(402) 271-5573
J. R. Beran
Chief Engineer-Design
(402) 271-3029
P. M. Abaray
Chief Engineer-Signals
(402) 271-3036
K. R. Welch
Chief Engineer-Facilities
(402) 271-4856

Mr. Allen Merritt
c/o State of Idaho
Department of Water Resources
222 Shoshone Street East
Twin Falls, Idaho 83301

Dear Mr. Merritt:

I am writing in reference to your letter dated October 3, 1990, regarding the Railroad's water rights, claims number 4201, 4202, 4203, 4204 and 4205, at various locations in Idaho.

As you were advised last week, due to the age of these water rights priority dates, many of our older records have been either misplaced during various reorganizations or have been simply destroyed throughout the years as irrelevant. However, during the 1950's, an in depth study was performed on all the Railroad's water rights, for which I do have copies of various abstracts of the facts that support our claimed priority dates.

Therefore, attached are several affidavits with attached copies of these abstracts for your files.

If I can be of further assistance or if you require additional information, please feel free to call Jack L. Nelson at (402) 271-2347.

Yours truly,

J. R. BERAN
Chief Engineer - Design

RECEIVED

NOV 19 1990

Department of Water Resources
Southern Region Office

MICROFILMED
FEB 01 1993

STATE OF NEBRASKA)

SS.

COUNTY OF DOUGLAS)

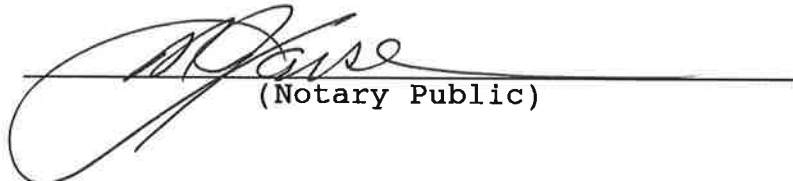
concerning

at

I, James R. Beran, being duly sworn, do hereby certify that I am Chief Engineer - of the Union Pacific Railroad Company and on behalf of said Company do further certify, that the abstract of the facts concerning the above referenced Water Rights Claim and priority date as accurately represented on the accompanying Exhibit "A" was made under authority of the Company; that the facts disclosed therein were obtained from information contained in files known to exist as of the date shown thereon; that presently, to the best of my knowledge and belief, the original sources of this information either cannot be located or do not exist.


Chief Engineer - Design

Sworn and subscribed to before me this 15 day of November, 19 80.



(Notary Public)

MICROFILMED
FEB 01 1993

MINIDOKA, IDAHO

OS-20-17

(Mainline Granger - Huntington)

Val. Sec. Idaho 3 R

Not now a watering station.

Our file dates back to 3-24-1923 with no correspondence between 5-14-1923 and 9-26-1929,

Valuation Dept. "Engineering Report" states as follows:

Well #1 drilled in 1891, 14" x 284'

Well #2 drilled in 1903, 14" x 284'

Well #3 drilled in 1912, 14" x 390'

Bridge Dept. has a log of #3 well only, in their Log file. In our file under date of 5-11-1934 the Electrical Engr. stated #2 well was 385' deep. Believe the "Engineering Report" 284' depth to be more authentic.

W.O. 2572 of 7-3-1939 retired well #1.

No record in our files of well #2 except OSL statement of locomotive watering stations corrected to 10-1-1923 which states "284' deep well with 6" drop line, 1 Cook steam pump size 12" x 36" capacity 3500 GPH", and Electrical Engr's letter of 5-11-1934 which states static level of water 190', drawdown 5', working barrel 8" to depth of 258'.

Log of Well #3 states:

"14" dia. x 390' deep, 52 ft. of 14" O.D. casing, balance of 14" hole uncased.

"Drilling started 9-23-1912, completed 10-14-1912.

"Struck water at 208', struck heavy flow at 325', static level of water 185'. Tested 11-5 and 11-6-1912 to 100,800 GPD which was capacity of test pump. Estimated capacity of well 200,000 GPD. Location of well, 87.5' north of center of main track, station 3849 / 18."

2-24-1956 General Manager at Portland asking V.P. Hicks for retirement of wells #2 and #3 and using City water.

We have a Vested Right to the water with a priority of 1891. First law governing appropriation of underground water in Idaho passed in 1951.

RESUME:

We have two deep wells, one 14" x 284' deep and one 14" x 390' deep, in use, electric operated pumps.

Have a Vested Water Right with priority of 1891. General Manager requesting permission to retire both wells.

H.S.
5-9-1956

(1891 - 1956)

MICROFILMED
FEB 01 1993

On account of dieselization in this territory, water and coal-
ing facilities were retired by W.O. 5056 on April 11, 1957.
Watering facilities consisted of: two 14" wells, 284' and 390'
deep, 350,000 gal. steel water tank, 14' x 18' and 32' x 30'
frame pump houses, two 10" water columns, pumping equipment
and piping.

Portion of above facilities were donated to Village of Minidoka
under "Memorandum of Gift", C.D. No. 43306, dated July 9, 1957.
Donation included: "350,000 gal. steel tank on 30' steel tower,
frost box, 14.5' x 17.3' frame pump house, 340' of 6" C.I.P.
fill line, 60' of 6" C.I. overflow line in tank and frost box,
330' of 10" C.I. pipe, 40' of 18 $\frac{1}{2}$ " casing, one 150 G.P.M. deep
well turbine pump #130119, 222' of 5" W.I. drop line, 222' of
13/16" x 2" pump rods, one 20 H.P. G.E. elec. motor, 3 trans-
formers, one 15 H.P. fire pump, and two 4000 watt electric
heaters".

To have and to hold forever. Signed by E. Hicks, Executive Vice
President.

W.O. 4458 6-20-58 Installed 35'-6" G.I.P. water line connection
including valve and valve box for the village of Minidoka.

MICROFILMED
FEB 01 1993



State of Idaho
DEPARTMENT OF WATER RESOURCES

Southern Region, 222 Shoshone St. East, Twin Falls, Idaho 83301 (208) 734-3578

CECIL D. ANDRUS
Governor

R. KEITH HIGGINSON
Director

October 3, 1990

AS6-04200
UNION PACIFIC RAILROAD CO.
1416 GEORGE ST

OMAHA

VE 00177

Dear Claimant(s):

In the past you submitted the claim(s) identified with the number(s) shown above your name and address at the top of this letter. You indicated on the claim(s) that the basis for establishing the water right(s) was Beneficial Use, meaning the water right was not previously confirmed by a decree, water right license or permit before you filed the claim(s).

The purpose of this letter is to request evidence supporting the priority date(s) you have claimed. The enclosed pamphlet describes what this means. While I encourage you to read all of the pamphlet, I direct your attention to the right-hand half of the pamphlet after you open it. There you will find two sections: What Kind of Evidence is Required, and Some Examples of Documents which May Be Evidence of the Priority Date. These sections tell you what must be submitted. The other sections tell you why the evidence is necessary and what the consequences of not submitting the evidence could be.

Please submit the requested evidence by November 1, 1990. When returning to the Department please reference all documents with the claim(s) identification number(s) listed above.

If you have questions not addressed by the pamphlet or need other technical assistance, please feel free to contact this office. For advice on your water right(s), please contact your attorney.

Sincerely,

Allen Merritt, P.E.
Water Rights Supervisor

Enclosure

MICROFILMED
FEB 01 1993

ION PACIFIC RAILROAD COMPANY

ENGINEERING DEPARTMENT



S. J. McLAUGHLIN,
Vice President-Engineering
Room 1200
(402) 271-3018

Mailing Address:
Room 920
1416 Dodge Street
Omaha, Nebraska 68179

November 16, 1990

Drain & Waterway: Idaho
Water Source

C. D. Barton
Chief Engineer-M/W East
(402) 271-3792
C. L. Jensen
Chief Engineer-M/W West
(402) 271-5573
J. R. Beran
Chief Engineer-Design
(402) 271-3029
P. M. Abaray
Chief Engineer-Signals
(402) 271-3036
K. R. Welch
Chief Engineer-Facilities
(402) 271-4856

RECEIVED

NOV 19 1990

Department of Water Resources
Southern Region Office

Mr. Allen Merritt
c/o State of Idaho
Department of Water Resources
222 Shoshone Street East
Twin Falls, Idaho 83301

Dear Mr. Merritt:

I am writing in reference to your letter dated October 3, 1990, regarding the Railroad's water rights, claims number 4201, 4202, 4203, 4204 and 4205, at various locations in Idaho.

As you were advised last week, due to the age of these water rights priority dates, many of our older records have been either misplaced during various reorganizations or have been simply destroyed throughout the years as irrelevant. However, during the 1950's, an in depth study was performed on all the Railroad's water rights, for which I do have copies of various abstracts of the facts that support our claimed priority dates.

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If I can be of further assistance or if you require additional information, please feel free to call Jack L. Nelson at (402) 271-2347.

Yours truly,

J. R. BERAN
Chief Engineer - Design

MICROFILMED
FEB 01 1993

STATE OF NEBRASKA)
)
COUNTY OF DOUGLAS) ss.

A F F I D A V I T

concerning

Water Rights Claim Number 4203

at

Minidoka, Idaho

I, James R. Beran, being duly sworn, do hereby certify that I am Chief Engineer - of the Union Pacific Railroad Company and on behalf of said Company do further certify, that the abstract of the facts concerning the above referenced Water Rights Claim and priority date as accurately represented on the accompanying Exhibit "A" was made under authority of the Company; that the facts disclosed therein were obtained from information contained in files known to exist as of the date shown thereon; that presently, to the best of my knowledge and belief, the original sources of this information either cannot be located or do not exist.



Chief Engineer - Design

Sworn and subscribed to before me this 15 day of
November, 1990.





(Notary Public)

MICROFILMED
FEB 01 1993

MINIDOKA, IDAHO

OS-20-17

(Mainline Granger - Huntington)

Val. Sec. Idaho 3 R

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Bridge Dept. has a log of #3 well only, in their Log file. In our file under date of 5-11-1934 the Electrical Engr. stated #2 well was 385' deep. Believe the "Engineering Report" 284' depth to be more authentic.

W.O. 2572 of 7-3-1939 retired well #1.

No record in our files of well #2 except OSL statement of locomotive watering stations corrected to 10-1-1923 which states "284' deep well with 6" drop line, 1 Cook steam pump size 12" x 36" capacity 3500 GPH", and Electrical Engr's letter of 5-11-1934 which states static level of water 190', drawdown 5', working barrel 8" to depth of 258'.

Log of Well #3 states:

"14" dia. x 390' deep, 52 ft. of 14" O.D. casing, balance of 14" hole uncased.

"Drilling started 9-23-1912, completed 10-14-1912.

"Struck water at 208', struck heavy flow at 325', static level of water 185'. Tested 11-5 and 11-6-1912 to 100,800 GPD which was capacity of test pump. Estimated capacity of well 200,000 GPD. Location of well, 87.5' north of center of main track, station 3849 / 18."

2-24-1956 General Manager at Portland asking V.P. Hicks for retirement of wells #2 and #3 and using City water.

We have a Vested Right to the water with a priority of 1891. First law governing appropriation of underground water in Idaho passed in 1951.

RESUME:

We have two deep wells, one 14" x 284' deep and one 14" x 390' deep, in use, electric operated pumps.

Have a Vested Water Right with priority of 1891. General Manager requesting permission to retire both wells.

H.S.
5--9-1956

(1891 - 1956)

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FEB 01 1993

On account of dieselization in this territory, water and coal-ing facilities were retired by W.O. 5056 on April 11, 1957. Watering facilities consisted of: two 14" wells, 284' and 390' deep, 350,000 gal. steel water tank, 14' x 18' and 32' x 30' frame pump houses, two 10" water columns, pumping equipment and piping.

Portion of above facilities were donated to Village of Minidoka under "Memorandum of Gift", C.D. No. 43306, dated July 9, 1957. Donation included: "350,000 gal. steel tank on 30' steel tower, frost box, 14.5' x 17.3' frame pump house, 340' of 6" C.I.P. fill line, 60' of 6" C.I. overflow line in tank and frost box, 330' of 10" C.I. pipe, 40' of 18½" casing, one 150 G.P.M. deep well turbine pump #130119, 222' of 5" W.I. drop line, 222' of 13/16" x 2" pump rods, one 20 H.P. G.E. elec. motor, 3 transformers, one 15 H.P. fire pump, and two 4000 watt electric heaters".

To have and to hold forever. Signed by E. Hicks, Executive Vice President.

W.O. 4458 6-20-58 Installed 35'-6" G.I.P. water line connection including valve and valve box for the village of Minidoka.

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FEB 01 1993



State of Idaho

DEPARTMENT OF WATER RESOURCES

1341 Fillmore Street, Suite 200, Twin Falls, ID 83301-3380

Phone: (208) 736-3033 FAX: (208) 736-3037

SOUTHERN REGION

DIRK KEMPTHORNE
GOVERNOR

KARL J. DREHER
DIRECTOR

November 22, 1999

Larry Stachler
USDA Rural Development
1441 N. Fillmore
Twin Falls, ID 83301

RE: City of Minidoka

Dear Mr. Stachler:

I have reviewed the proposed water system upgrades for the City of Minidoka as provided in the November 3, 1999 letter from Mayor Homer. I have also reviewed the recorded water rights for the uses surrounding the City of Minidoka and find that the city's rights are recorded in rights 36-04203 and 36-04204. Please find enclosed printouts for these rights.

If the proposed modifications to the water system do not change the way these rights are used or do not change the diversion limits as listed on these printouts then this agency has no comment. If the modifications increase the diversion rate of the system or change the elements of these water rights then either additional water rights will need to be obtained or these rights may need to be modified by filing a transfer.

If the proposed project modifies the construction of the wells (changes the casing or surface seal, etc) or if the wells are re-drilled then well drilling permits from this agency may be required.

If you have questions, please feel free to contact this office.

Sincerely,

Allen Merritt, PE
Southern Region Manager

City of Minidoka

P.O. Box 85
Minidoka, Idaho 83343
208-531-4101

RECEIVED
NOV 15 1999
Department of Water Resources

November 3, 1999

Idaho Department of Water Resources
1310 N. Orchard
Boise, Idaho 83706-2237

Re: Notification of Intent to Apply for Federal Assistance
Request for Intergovernmental Review/Comments
In accordance with E.O. 12372

The **City of Minidoka** has applied to USDA Rural Development for financial assistance to develop the project described on the enclosed copy of the Application for Federal Assistance. Federal Executive Order 12372 requires that State and local governments be given an opportunity to review and comment on projects applying for federal assistance.

In order to comply with the requirements of Federal Executive Order 12372, the following information is provided for your review and comment:

1. Copy of Standard Form 424, "Application for Federal Assistance".
2. Project map showing the geographic location of the project, the proposed improvements and the service area.
3. A brief description of the proposed project with a cost estimate. Federal program title, number, and agency under which assistance is being sought.

Please use the attached response form and address your comments to:

Larry Stachler
USDA Rural Development
1441 N. Fillmore
Twin Falls, Idaho 83301

If no comments are received within thirty (30) days from the date of this letter, the applicant and the federal agency will assume that your office has no comment and the application process will continue without the benefit of your input. If you have any questions, please contact Carleen Herring, Region IV Development Association at (208) 732-5727.

Thank you for your time and consideration.

Sincerely,


Maxine Homer, Mayor

Intergovernmental Review Comment Sheet
For

Applicant Name: **City of Minidoka**

Project Description: **Water System**

To Agency Addressed:

If you intend to comment but cannot respond to USDA Rural Development within thirty (30) calendar days, please notify USDA Rural Development immediately. If no response is received by the due date, it will be assumed that you have no comment and the file will be closed.

Program review and comment

To: USDA Rural Development

We have reviewed the subject pre-application for Federal Assistance and have reached the following conclusions on its relationship to our plans and programs:

- () It has no adverse effect.
- () We have no comment.
- () Effects, although measurable, would be acceptable.
- () It has adverse effects. (Explain in remarks section.)
- () We are interested but require more information to evaluate the proposal.
(Explain in the remarks section.)
- () Additional comments for project improvement. (Attach if necessary.)

REMARKS:

Agency: _____ **By:** _____

Phone Number: _____

Figure 1
Standard Form 424

OMB Approval No. 0348-0043

**APPLICATION FOR
FEDERAL ASSISTANCE**

1. Type of Submission: Application ☒ Construction ☐ Non-Construction Preapplication ☐ Construction ☐ Non-Construction		2. DATE SUBMITTED		Applicant Identifier	
		3. DATE RECEIVED BY STATE		State Application Identifier	
		4. DATE RECEIVED BY FEDERAL AGENCY		Federal Identifier	
5. APPLICANT INFORMATION					
Legal Name: <i>City of Minidoka</i> Address (give city, county, state, and zip code) <i>306 Sears - P.O. Box 85</i> <i>Minidoka, Minidoka County, Idaho 83343</i>				Organizational Unit: <i>Municipality</i> Name and telephone number of person to be contacted on matters involving this application (give area code) <i>Maxine Homer, Mayor</i> <i>(208)531-4484</i>	
6. EMPLOYER IDENTIFICATION NUMBER (EIN) 8 2 - 0 3 4 4 8 3 2				7. TYPE OF APPLICATION: (enter appropriate letter in box) C	
8. TYPE OF APPLICATION: ☒ New ☐ Continuation ☐ Revision If revision, enter appropriate letter(s) in box(es) ☐ A. Increase Award ☐ D. Decrease Duration ☐ B. Decrease Award ☐ Other (specify) _____ ☐ C. Increase Duration				A. State B. County C. Municipal D. Township E. Interstate F. Intermunicipal G. Special District H. Independent School District I. State Controlled Institution of Higher Learning J. Private University K. Indian Tribe L. Individual M. Profit Organization N. Other (Specify) _____	
10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER: 1 0 - 7 6 0 TITLE: <i>Water and Waste Disposal Systems for Rural Communities</i>				9. NAME OF FEDERAL AGENCY: <i>USDA - Rural Development</i>	
12. AREAS AFFECTED BY PROJECT (Cities, Counties, States, etc.) <i>City of Minidoka, Minidoka County, Idaho</i>				11. DESCRIPTIVE TITLE OF APPLICANTS PROJECT: <i>Minidoka Water System Improvement Project</i>	
13. PROPOSED PROJECT		14. CONGRESSIONAL DISTRICTS OF:			
Start Date <i>Apr-00</i>	Ending Date <i>Oct-00</i>	a. Applicant <i>Idaho 2</i>		b. Project <i>Idaho 2</i>	
15. ESTIMATED FUNDING:		16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?			
a. Federal	\$	<i>375,000.00</i>		a. YES. THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON: DATE: <i>03-Nov-99</i> b. ☐ PROGRAM IS NOT COVERED BY E.O. 12372 ☐ OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW	
b. Applicant	\$	<i>125,000.00</i>			
c. State - HUD- ICDBG	\$	<i>95,300.00</i>			
d. Local	\$	<i>5,000.00</i>			
e. Other	\$	<i>-</i>			
f. Program Income	\$	<i>-</i>		17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT? ☐ Yes If "Yes, attach explanation. ☒ No	
g. TOTAL	\$	<i>600,300.00</i>			
18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION ARE TRUE AND CORRECT, THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED.					
a. Type Name of Authorized Representative <i>Maxine Homer</i>		b. Title <i>Mayor</i>		c. Telephone Number <i>(208) 534-4484</i>	
d. Signature of Authorized Representative				e. Date Signed <i>10/17/1999</i>	

Idaho Community Development Block Grant

Applicant: City of Minidoka Address: P.O. Box 85 Minidoka, Idaho 83343
Chief Elected Official: Maxine Homer, Mayor Phone: (208) 531-4101

Application Prepared By: Carleen Herring Phone: (208) 732-5727
Address: Region IV Development Association
P. O. Box 5079 Twin Falls, Idaho 83303 - 5079

Engineer: Jaylen Walker, E.I.T. Phone: (208) 288-1992
Address: Keller Associates, Inc.
131 S.W. 5th Avenue Meridian, Idaho 83642

National Objectives	Project Category	Project Financing	
LMI	Public Facility	ICDBG	95,300
Slum and Blight	Housing	Local - Bond	125,000
Imminent Threat	Economic Development	Local - In-kind	5,000
		USDA Rural Development	375,000
		TOTAL	600,300

Project Area Population: 86 Project Area LMI: 67 (77.91% - 1990 Census)

1. Have any land, buildings, easements or right-of-way been purchased for this project? NO
2. Is anyone living on the land or in the structures at the proposed site? N/A
3. Is any business being conducted on the land or in the structures at the proposed site?
N/A

Detailed Project Description: The project consists of the overhaul of the Minidoka municipal water system, including the installation of roughly 7,000 linear feet of water system distribution lines, including fire hydrants and appurtenant valves; construction of 46 LMI household water services with meters; construction of a new 140,000 gallon storage reservoir; well improvements including pump modifications, chlorination, and booster pump placement; and the installation of a standby power generator. The project also includes minor ADA/504 accessibility improvements at City Hall.

Describe pure local matching funds: The City of Minidoka is among the poorest communities in the State. The residents have maximized their local commitment for this project through a successful bond election. With **100% voter turnout**, 24 of the 25 valid ballots were in support of the \$125,000 issue. This commitment will result in a \$25.00 per month basic water bill for residents whose per capita income is only \$4,930 - barely 1/4th of the National average. Almost 43% of the population are living below the poverty threshold. Total "pure" local share is \$130,000 or 22% of the project cost. This is a combination of \$125,000 cash from the bond proceeds and a commitment of \$5,000 in force account labor to assist the City complete improvements for ADA/504 Compliance. USDA Rural Development has offered to purchase the bond at a 3.25% interest rate for 30 years in combination with a \$375,000 grant to the City. The ICDBG request is for only 16% of the total project costs.

Certification: The data in this application is true and correct. The governing body of the City has duly authorized this document and the City will comply with all required certifications, laws, and regulations if the application is approved and selected for funding.

Maxine Homer, Mayor

November 19, 1999

City of Minidoka - Water System Improvement Project

	Quantity	Unit	Unit Price	Total Estimated Cost
Distribution system replacement				
1 Mobilization/demobilization	1	LS	7,000.00	7,000.00
2 Distribution piping				
6-inch	6,950	LF	12.50	86,875.00
8-inch	1,100	LF	16.50	18,150.00
3 Pipe trenching				
Retain utilities	5,000	LF	0.50	2,500.00
Temporary utilities	10	EA	100.00	1,000.00
Concrete encasement	100	LF	16.00	1,600.00
4 Street repairs				
Class A - paved	1,400	SY	12.00	16,800.00
Class C - 3/4" gravel	550	CY	12.00	6,600.00
5 Utility crossings				
Culvert gravel support	15	CY	12.00	180.00
12" CMP (installed)	50	LF	17.00	850.00
6 Fire Hydrants	4	EA	2,100.00	8,400.00
7 Mainline gate valves				
6-inch	9	EA	400.00	3,600.00
8-inch	8	EA	550.00	4,400.00
8 Miscellaneous repairs	1	LS	2,500.00	2,500.00
9 Project Sign	1	LS	500.00	500.00
10 Water Services				
3/4 x 6-inch saddle	31	EA	110.00	3,410.00
3/4 x 8-inch saddle	28	EA	120.00	3,360.00
1 x 6-inch saddle	1	EA	130.00	130.00
3/4-inch service line	1,000	LF	5.00	5,000.00
1-inch service line	25	LF	6.00	150.00
Service line backfill	1,025	LF	8.00	8,200.00
				<u>181,205.00</u>
Meters, Service lines, Standby Power				
1 Standby Power Generator	1	LS	38,000.00	38,000.00
2 Water Service Lines				
Meter sets	45	EA	450.00	20,250.00
LMI service lines	46	EA	1,250.00	57,500.00
				<u>115,750.00</u>
Backup Well Pump Modifications				
1 Mobilization/Demobilization	1	LS	1,200.00	1,200.00
2 Pull existing pump and motor	1	LS	1,600.00	1,600.00
3 Provide and install new pump	1	LS	2,500.00	2,500.00
4 Piping modifications/connections	1	LS	1,500.00	1,500.00
				<u>6,800.00</u>
New 140,000 storage reservoir				
1 140,000 gallon bolted steel	1	LS	80,000.00	80,000.00
2 Reservoir Sitework	1	LS	18,000.00	18,000.00
3 Yard piping	1	LS	7,500.00	7,500.00
				<u>105,500.00</u>
Booster Station for ground level tank				
1 Mobilization/Demobilization	1	LS	2,500.00	2,500.00

2	Sitework and Piping	1	LS	10,000.00	10,000.00
3	Pump Station Building	1	LS	18,000.00	18,000.00
4	Pump Station Electrical	1	LS	20,000.00	20,000.00
5	Pump Station Mechanical	1	LS	30,000.00	30,000.00
					<u>80,500.00</u>

New Chlorination for Back-up Well

1	Mobilization/Demobilization	1	LS	1,000.00	1,000.00
2	New Chlorinator	1	LS	4,500.00	4,500.00
3	Piping Modifications/Connections	1	LS	1,500.00	1,500.00
4	Electrical Modifications	1	LS	1,200.00	1,200.00
					<u>8,200.00</u>

Construction Total 497,955.00

Engineering	74,850.00	
Administration	9,520.00	
ADA Improvements	10,000.00	
Bond Counsel	5,000.00	
Single Audit	2,500.00	
Publications	475.00	
	<u>102,345.00</u>	102,345.00

TOTAL PROJECT COST 600,300.00

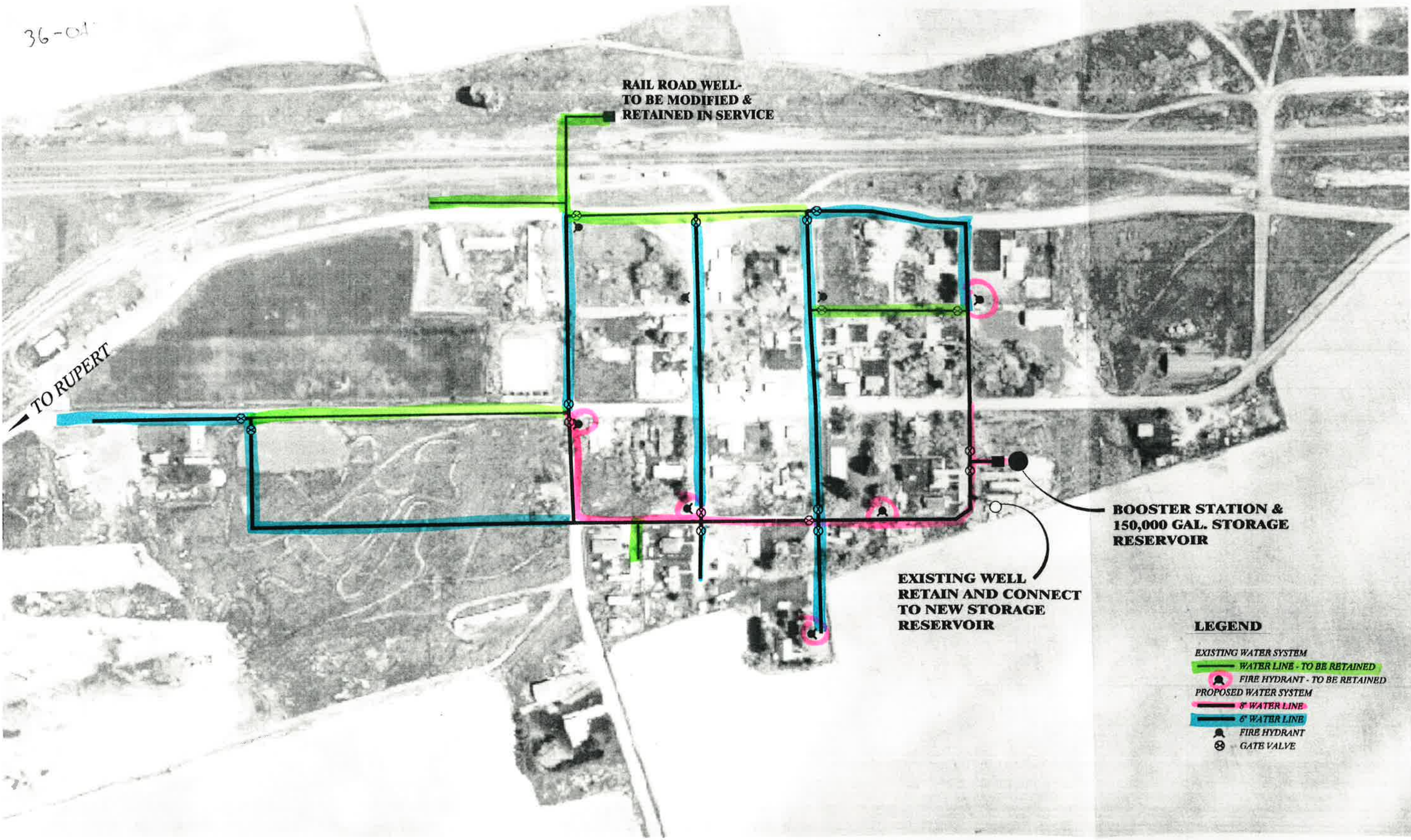
Bond	125,000.00	21%
Force Account	5,000.00	1%
RD Grant	375,000.00	62%
ICDBG	95,300.00	16%
	<u>600,300.00</u>	<u>100%</u>

Idaho Community Development Block Grant
Budget
Attachment A

Grantee: City of Minidoka
Grant Number:

Line Item	ICDBG	Local Bond	Local In-Kind	USDA Rural Development	Total
Administration	9,520				9,520
Audit	-	2,500			2,500
Bond Counsel	-	5,000			5,000
Construction	85,305	117,500	5,000	300,150	507,955
Engineering	-	-		74,850	74,850
Publications	475	-			475
TOTAL	95,300	125,000	5,000	375,000	600,300

36-04



LEGEND

- EXISTING WATER SYSTEM
 WATER LINE - TO BE RETAINED
 FIRE HYDRANT - TO BE RETAINED
 PROPOSED WATER SYSTEM
 8" WATER LINE
 6" WATER LINE
 FIRE HYDRANT
 GATE VALVE

NO.	REVISIONS	BY	DATE

This document or any part thereof in detail or design concept is the personal property of Keller Associates, Inc. and shall not be copied in any form without the written authorization of Keller Associates, Inc.

DRAWN:	JLT	CHECKED:	
DESIGNED:		APPROVED:	
CAD NAME:	AERIAL	SCALE:	Approx. 1"=200'

KELLER
 ASSOCIATES
 131 SW 5th Avenue, Suite A
 Meridian, Idaho 83642
 (208) 288-1992

City of
Minidoka, Idaho

PROPOSED WATER SYSTEM
FIGURE 3

PROJECT NO.	198009
SHEET NO.	

IDAHO DEPARTMENT OF WATER RESOURCES
ADJUDICATION CLAIM PROFILE REPORT

OWNER CODE	NAME & ADDRESS	PRIORITY DATE	WATER USE	USE PERIOD FROM TO	DIVERSION RATE	DIVERSION VOLUME
C	UNION PACIFIC RAILROAD CO 1416 DODGE ST OMAHA NE 68179 (402) 271-3728	09/13/1957	COMMERCIAL MUNICIPAL DOMESTIC	01-01 12-31 01-01 12-31 01-01 12-31	0.03 CFS 0.22 CFS 0.10 CFS	
TOTAL DIVERSION:					0.22 CFS	

Water Source: GROUNDWATER

Tributary to:

Stage: BENEFICIAL USE

Point(s) of Diversion: T08S R25E S01 NWNWSW SENWSW MINIDOKA County

Place of use Legal Description for: COMMERCIAL

NE				NW				SW				SE			
T	R	S		Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac
08S	25E	2	:	:	:	:	:	:	:	:	:	:	:	:	:

Place of use Legal Description for: DOMESTIC

NE				NW				SW				SE			
T	R	S		Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac	Lt	Ac
08S	25E	1	:	:	:	:	:	:	:	:	:	:	:	:	:
08S	25E	2	:	:	:	:	:	:	:	:	:	:	:	:	:

POU County: MINIDOKA

Non-Irrigation Uses: MUN,CITY OF MINIDOKA;DOM,5 HOMES;COMM,BEET DUMP, GRAINERY, DEPOT

Other Rights: 36-04204

Conditions of Approval:

- C03 - RIGHT INCLUDES ACCOMPLISHED CHANGE IN POINT OF DIVERSION
- PURSUANT TO SECTION 42-1425, IDAHO CODE.
- C04 - RIGHT INCLUDES ACCOMPLISHED CHANGE IN PURPOSE OF USE PURSUANT
- TO SECTION 42-1425, IDAHO CODE.
- C05 - RIGHT INCLUDES ACCOMPLISHED CHANGE IN PLACE OF USE PURSUANT TO
- SECTION 42-1425, IDAHO CODE.

Remarks: GEN PLACE OF USE IS LANDS WITHIN CITY LIMITS OF MINIDOKA.

RIGHT NO. 36-04204 IS ALSO DIVERTED THROUGH POINTS OF DIVERSION
DESCRIBED ABOVE, AND THE TOTAL COMBINED RATE OF DIVERSION OF
THESE RIGHTS IS LIMITED TO .55 CFS AND A COMBINED TOTAL
CONSUMPTIVE USE VOLUME OF 51 AFA.

Dates: Exam Made Date: Verified Date: Objection Filed Date:

Misc: Water District Number: Field Inspection Flag: C
Presumption Flag:

R PROOF

CVR

MAPS

PHOTOS

MISC

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OCT 19 1994

**ENERGY EFFICIENCY EVALUATIONS
FOR PUMPS
IN THE
CITY OF MINIDOKA, IDAHO**

Prepared by
Scott King
Rick Sterling, P.E.

Idaho Department of Water Resources
Boise, Idaho

February 1991

MICROFILMED
OCT 19 1994

TABLE OF CONTENTS

Summary.....	1
Introduction.....	2
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Energy Charges.....	5
Demand Charges.....	6
Possible Corrective Measures.....	7
Results.....	9
Recommendations.....	13

Appendices:

- Appendix A - Financing
- Appendix B - Pump Test Summaries
- Appendix C - How to Monitor Pump Efficiency

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OCT 19 1994

SUMMARY

An energy efficiency evaluation was conducted for a pumping plant in the City of Minidoka, Idaho. The purpose of the evaluation was to determine the energy savings, and thus dollar savings, that could be achieved if the pump was to be improved to operate at its optimum efficiency.

The pump efficiency test results indicate that the pump's efficiency is about 65 percent, assuming the historic pumping water level of 235 feet is still fairly accurate (the water level could not be measured during the September 1989 exam). This is considered "excellent" according to standards established for electrically-driven centrifugal pumps. This pump is operating very near optimum and repair is not recommended.

The Idaho Department of Water Resources offers financing to assist cities in making cost effective pump improvements. Loans up to \$50,000 are available at six percent interest for qualifying projects. Since financing is limited, loans are offered on a first come, first served basis. Contact IDWR for information on the loan program or for assistance in planning pump improvements.

INTRODUCTION

Pumping plant efficiency evaluations were recently conducted for the city by the Idaho Department of Water Resources. This report discusses the results of those evaluations.

The primary purpose in conducting the evaluations was to test the energy efficiency of the city's water system pumps, and to determine the energy savings that could be achieved if the pumps were to be improved to perform at their optimum efficiency. These energy savings are translated into energy cost savings based on the electric rates presently in effect. Using the cost savings presented here, it is the responsibility of the city to contact pump dealers, contractors or consultants to obtain estimates of the cost necessary to make pump improvements, and subsequently to determine whether improvements would be cost effective. The ultimate objective of the evaluations is to assist the city in achieving the least cost, most energy efficient system possible.

In addition to the primary purpose of evaluating energy efficiency, one of the secondary purposes is to assess the performance of the flow meters, pressure gauges and water level indicators which are presently installed in the pumping plants. While this in itself may not save energy, it should lead to a better managed system.

It should be noted that the pump tests are not a complete system analysis or hydraulic evaluation. Time and manpower restrictions prohibit an evaluation of an entire water system or its operation. It should also be noted that if changes are implemented on one pump, further system analysis may be necessary to determine the effect on other interconnected parts of the system.

This program is being funded through Exxon oil overcharge funds received by the State of Idaho, with additional funding provided by the Bonneville Power Administration. To complement this program, IDWR also administers a low interest loan program to assist cities with financing of energy conservation projects.

Details of the loan program are presented in Appendix A. Loans offered through this program are not restricted only to improvements to pumping plants, but are available for any type of eligible energy conservation project.

METHODS AND PROCEDURES

To gather the data necessary to compute overall pumping plant efficiencies, four items are measured for each pump tested; 1) flow rate, 2) discharge pressure, 3) pumping water level, and 4) power input. Flow rate is measured using a Collins, Hall, Annubar, or Sonic meter. These flow meters are usually accurate to within ± 5 percent of the true flow when installed under conditions specified by the manufacturer. Discharge pressure is measured using a liquid-filled pressure gauge accurate to within 1 psi. Pumping water level is measured using an air line when one has been installed; an electric well probe or steel measuring tape is used when an air line has not been installed. Power input is measured using the utility's electric meter when it is accessible; measurements are taken inside the electrical panel when a meter is not accessible.

Flow rates, discharge pressures and pumping water levels as measured by IDWR and as recorded by gauges and meters during the test are summarized in Table 1. IDWR measurements can be assumed to be at least as accurate as those recorded by the city's flow meters and gauges. Consequently, if a significant difference (more than 10 percent) exists between IDWR measurements and the city's, it is recommended that the city have their meters and gauges checked.

TABLE 1

CITY OF MINIDOKA
MUNICIPAL WATER WELL DATA

<u>PUMP ID</u>	<u>FLOW RATE (GPM)</u>			<u>DISCHARGE PRESSURE (PSI)</u>		
	<u>IDWR</u>	<u>CITY</u>	<u>% DIFFERENCE</u>	<u>IDWR</u>	<u>CITY</u>	<u>% DIFFERENCE</u>
WELL PUMP	236.2	---	---	26	---	---
	<u>AIR LINE LENGTH (FT)</u>	<u>AIR LINE PRESSURE (PSI) STATIC PUMPING</u>		<u>AIR LINE WATER LEVEL (FT) STATIC PUMPING</u>		<u>STEEL TAPE WATER LEVEL (FT) STATIC PUMPING</u>
WELL PUMP	---	---	---	---	---	235*

* Assumed pumping water level based upon city records.

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OPORTUNITIES FOR ENERGY SAVINGS IN PUMPING PLANTS

Municipal pumping plants in Idaho are usually billed two ways; 1) energy charges for total energy used in kWh, and 2) demand charges for the peak electrical demand in kW recorded during the billing period. Energy cost savings can be achieved by reducing either or both.

Energy Charges

An energy charge is assessed for each kWh of energy consumed by a pumping plant. For example, a 50 kW (67 hp) pump operating 100 hours during the billing period consumes (50 x 100) 5000 kWh of energy. To reduce energy charges, either the power requirement (50 kW), the hours of operation, or both must be reduced. The power requirement (demand) can be reduced by improving the pump efficiency. Hours of operation can only be reduced if the flow rate is increased, since the same total volume of water must be pumped. Replacing an existing inefficient pump with a new pump of the same design will reduce the hours of operation and possibly the electrical demand. Replacing an existing inefficient pump with a new pump designed to deliver the present flow will only decrease electrical demand, not hours of operation. However, it may save just as much energy.

The assumption used for the analysis in this report is that existing inefficient pumps would be replaced with new pumps that would deliver the present flow and pressure. Admittedly however, it is more likely that old pumps would be replaced with pumps that would restore, or even increase original flows and pressures. This could result in a greater power requirement, thus lower energy savings than are projected in this report. However, it is very important to realize that by improving one pump in a water network, other pumps in the system will be called on to supply less of the water demand. Consequently, the energy savings presented in this report are estimates of system-wide savings, and are not intended to represent savings that would be achieved at each pumping plant

individually. The complex, interconnected nature of most municipal water systems makes it extremely difficult to accurately project energy savings at individual pumps, thus the reason for our approximate analysis procedure.

Demand Charges

For most municipal pumping plants, a demand charge is assessed for the peak power requirement in kW during the highest 15 minute period of use during the billing cycle. The purpose of the demand charge is to compensate the electric utility for their investment, upkeep and replacement cost of power lines, transformers, power generating stations and other equipment needed to supply electric energy to the consumer's premises. For the average residential customer, demand charges and energy charges are lumped together since demand and usage are relatively low and remain fairly constant throughout the year. However, for customers with large, intermittent electrical loads such as water system pumps, the charges are made separately since the utility's cost of service is not simply proportional to the amount of energy used.

A demand charge is assessed against the peak demand established during the billing period. It does not depend on the amount of time the pump operates, nor does it depend on the number of times the pump is turned on and off. Consequently, a full demand charge will be assessed against the customer if the pump operates at least the 15 minutes needed to establish the peak demand. Operation longer than 15 minutes, regardless of whether it is turned on once or many times, is billed through energy charges. Peak demand, as recorded by the utility's meter, is set back to zero each time the meter is read, so that a new peak demand can be established in the next billing cycle.

Demand charges can be reduced in two ways; 1) by reducing the peak power requirement of the pump, and 2) by turning on only those pumps needed to supply the water requirement. As was just discussed, peak demand is usually reduced when efficiency is improved. While this is highly recommended since it would certainly

reduce energy costs, improving pump efficiency requires some capital investment. On the other hand, leaving pumps turned off during an entire billing period costs nothing, and can save even more money than improvements in efficiency. This may be possible in many water systems since some pumps could be used only during the peak water demand period in the summer, used as backups, or used only in an emergency such as a fire.

Because of the way demand charges are assessed, it makes economic sense to utilize as few pumps as necessary to provide the needed water, and if necessary, to operate those pumps more hours. From an economic standpoint, it is not wise to share the pumping duty between two or more pumps when one can do the job. admittedly however, there are other valid reasons for not operating pumps in the most economic manner, and these should be given proper consideration.

POSSIBLE CORRECTIVE MEASURES

The efficiency of a municipal water pump could decrease because of a variety of reasons. Similarly, there are a variety of corrective measures that may need to be made to improve efficiency. Some of these are listed below.

1. Pump Replacement

Complete pump replacement may be the best option in cases where the efficiency is extremely poor or the pump is not repairable. It might also be necessary in cases where the pump is no longer operating under the conditions for which it was originally designed. Even pumps in good condition will perform poorly under the wrong pumping conditions. Pumping conditions can change significantly as cities add subdivisions, attract industry, replace water mains, or add storage tanks.

Pumping conditions can also change as water levels in wells drop. It is not usually satisfactory to simply lower

the pump in these cases. Additional, or a complete new set of impellers and bowls may be necessary.

Complete pump replacement can be very costly, especially if the bowls are set very deep. Consequently, significant energy savings must be possibly before it can be justified economically.

2. Impeller and Bowl Replacement

Impellers and bowls can become badly worn over time, due to abrasion, cavitation or corrosion. This results in decreased discharge pressure and flow. Replacing impellers is costly since the pump must be pulled and electrically disconnected, however, the energy savings may justify it in some cases.

3. Impeller Adjustment

On most pumps the clearance between the impeller and the pump bowl can be adjusted. This is done with an adjusting nut at the coupling or on top of the motor. It is a relatively inexpensive and simple procedure that can be done in one or two hours. The pump dealer can make the adjustment according to the manufacturer's specifications.

4. Motor Replacement

It is normally not cost effective to replace motors for reasons of improvement in efficiency since their efficiency will only decrease from one to five percent over their lifetime. Obviously however, motors do wear out and must be replaced. Overloading a motor by more than 15 percent of its rated load will cause overheating, thus shortening the life of the motor.

5. Power Factor Correction

Most utilities penalize customers for power factors below 85 percent. Penalties vary depending on the utility. Power

factors can be corrected by installing capacitors at the switchgear or near the motor. Corrections can be cost effective if the power factors are low enough and if the utility's penalty is severe.

6. Piping and Fitting Modifications

Piping and fitting modifications could be warranted in cases where the pump inlet or discharge piping causes excessive friction losses. This situation would most likely be present only in cases where replacement or booster pumps have been added later, and is only rarely encountered in original pumping plant designs.

Each corrective measure listed here is not necessarily recommended for every pump, and may in fact not always be possible. While the tests that have been conducted for the city do indicate whether a pump is performing optimally, they are not by themselves sufficient to specifically identify the corrective measures that should be implemented. These pump test results should only be used to identify those pumps in need of repair, while a pump dealer or an independent consultant should be consulted to determine which corrective measures to implement.

RESULTS

Pumping plant efficiencies can be judged from low to excellent using the information shown in Table 2. The figures shown represent the combined efficiencies of pumps and their associated motors. Notice that efficiencies, even for pumps and motors in excellent condition, do not approach 100 percent. This is because the peak efficiency of a new motor will be in the range of 85 to 95 percent, while the peak efficiency of a new pump will be in the range of 75 to 85 percent. The overall pumping plant efficiency as defined in this report is the product of the motor and pump efficiencies (i.e., $.75 \times .85 = .64$). For simplicity, minor efficiency losses are not

considered here. Notice also that the efficiencies of large pumping plants can be expected to be higher than that of smaller plants. The information shown in the table is based on the results of thousands of tests conducted in the West by Pacific Gas and Electric Company.

TABLE 2

Electric Powered Pump Standards for Tested Efficiencies

(from Pacific Gas and Electric Company,
77 Beale Street, San Francisco, CA 94106)

Motor Size (HP)	Ratings			
	<u>Low</u>	<u>Fair</u>	<u>Good</u>	<u>Excellent</u>
3-5	41.9 or less	42-49.9	50-54.9	55 or above
7.5-10	44.9 or less	45-52.9	53-57.9	58 or above
15-30	47.9 or less	48-55.9	56-60.9	61 or above
40-60	52.9 or less	53-59.9	60-64.9	65 or above
75+	55.9 or less	56-62.9	63-68.9	69 or above

The results of the efficiency test(s) conducted for the city are summarized in Table 3. Note that the present plant efficiencies shown in the second column are overall plant efficiencies, and are the figures used with Table 2 to classify a pump's general condition. Individual test results for each pump, along with the estimated energy savings are shown on each of the subsequent pages. Additional details of the test(s) and the calculations used in the analysis are shown in Appendix B.

TABLE 3

SUMMARY OF POTENTIAL ENERGY SAVINGS

OWNER OF PUMPS: CITY OF MINIDOKA

PUMP I.D.	PLANT EFFICIENCY (%)		POWER INPUT (KW)		ENERGY SAVINGS (KWH/YR)	COST SAVINGS (\$/YR)
	PRESENT	POTENTIAL	PRESENT	POTENTIAL		
WELL PUMP	65.0	68.6	20.6	19.5	2183.	120.09
TOTAL KWH SAVED _____						2183. KWH/YR
ENERGY COST SAVINGS @ \$ 0.0550/KWH _____						\$ 120./YR
DEMAND CHARGE SAVINGS _____						\$ 0./YR
TOTAL COST SAVINGS _____						\$ 120./YR

POTENTIAL ENERGY SAVINGS

OWNER OF PUMP: CITY OF MINIDOKA

PUMP I.D.: WELL PUMP (25-HP)

DATE OF PUMP TEST: 9/15/89

	WELL PUMP (25-HP)	
	PRESENT	POTENTIAL
OVERALL PUMPING PLANT EFFICIENCY (%)	65.0	68.6
ASSUMED ELECTRIC MOTOR EFFICIENCY (%)	88.0	88.0
PUMP EFFICIENCY (%)	73.9	78.0
TOTAL VOLUME OF WATER PUMPED (MG/YR)	28.3	28.3
PUMP DISCHARGE (GPM)	236.2	236.2
PUMP OPERATION (HR/YR)	2000.0	2000.0
INPUT HORSEPOWER (HP)	27.6	26.2
INPUT POWER (KW)	20.6	19.5
ESTIMATED ENERGY USE (KWH/YR):	41228.	39044.

ESTIMATED ANNUAL SAVINGS:

TOTAL ENERGY SAVINGS (KWH/YR)*	2183.
ENERGY COST SAVINGS (\$/YR @ 5.50 CENTS/KWH)	\$ 120.09
DEMAND CHARGE SAVINGS (\$/YR)**	\$ 0.00
TOTAL COST SAVINGS (\$/YR)	\$ 120.09

* ENERGY SAVINGS BASED ON INSTALLATION OF NEW BOWLS DESIGNED TO DELIVER THE TESTED DISCHARGE AND PRESSURE AT 78.0% PUMP EFFICIENCY, 88.0 % MOTOR EFFICIENCY, AND AN OVERALL EFFICIENCY OF 68.6%.

** DEMAND CHARGE SAVINGS COMPUTED ASSUMING PUMP OPERATES 12 MONTHS PER YEAR.

RECOMMENDATIONS

The pump test results presented in this report are intended to be used as a guide to indicate present pumping plant performance and in identifying pumps where significant energy savings could be made by improving pump performance. The energy and dollar savings figures presented should only be used as estimates and represent system-wide savings--not necessarily savings that will be realized at individual pumping plants.

The costs of implementing corrective measures are not included in this report. It is the city's responsibility to investigate these costs and to determine whether pump repairs would be cost effective. Recommendations for the pump tested are presented below.

WELL PUMP

The overall pumping plant efficiency was calculated to be approximately 65 percent. Since a pump characteristic curve could not be obtained for this pump, it is not known what the flow rate and pressure should be for optimum efficiency. However, based on the size of this pump, an overall plant efficiency of 65 percent is considered to be "excellent." Due to the high efficiency of this pump, repair is not recommended.

APPENDIX A
FINANCING

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FINANCING

The Idaho Department of Water Resources currently administers a program to assist municipalities with financing of energy conservation projects. While the financing program is intended to complement the pump testing program by financing pump improvements, any energy conservation project that meets the criteria of the program can qualify.

Financing is in the form of a loan with an interest rate of six percent. Loans must be repaid within five years. In order to qualify for a loan the proposed project must be able to demonstrate that the savings resulting from energy conservation measures will repay the amount of the loan in 10 years or less. Additional criteria are listed on Attachment 1. The maximum amount that can be borrowed is \$50,000. Financing will be available only as long as the money allocated for the program is available. Attachment 2 is a sample application form.

Since the financing through this program is in the form of a long term loan, many cities have previously expressed concern about the legality of a city incurring long term debt. Traditionally, the financing of municipal projects has not been in the form of loans because of this restriction. However, according to an opinion provided by the Idaho State Attorney General, improvements to a municipal pumping plant are classified as "regular and necessary," therefore eligible for financing through a long-term loan. One advantage of financing pump improvements with a loan is that money does not have to be budgeted beforehand or bonds do not have to be sold. The savings generated by the pump improvements should be sufficient to make loan payments.

Certainly other forms of financing more traditionally used by cities can also be used to make pump system improvements. Some of these financing programs are discussed in Attachment 3.

GOVERNMENTAL, AGRICULTURAL, AND SCHOOLS, HOSPITALS, AND
HEALTH CARE FACILITIES SECTORS

CRITERIA FOR TECHNICAL AND ECONOMIC FEASIBILITY REVIEW
BY THE DEPARTMENT OF WATER RESOURCES

TO BE ELIGIBLE, PROJECTS MUST:

1. Be conducted within the state of Idaho.
2. Be consistent with the State Energy Plan.
3. Demonstrate energy conservation in governmental, agricultural, or schools, hospitals, health care facilities sectors as defined by the Department.
4. Demonstrate the ability to conserve energy through efficient energy use or the utilization of renewable energy resources which results in energy savings based upon a net reduction in the use of non-renewable resources.
5. Utilize existing, reliable technologies.
6. Show displacement of conventional energy source(s).
7. Show energy savings.
8. Demonstrate a simple payback period of ten years or less for the total cost of the project based on estimated annual energy savings. This may be subject to waiver in unusual circumstances.
9. Meet federal and state air and water quality standards.

PROJECTS MAY:

1. Not include new construction, EXCEPT for utilization of a renewable resource. Project eligibility for renewable resources will be determined on a case-by-case basis. Retrofits to existing irrigation systems that meet program criteria are eligible. Irrigation systems on land not previously irrigated do not qualify as no energy savings can be documented.
2. Not utilize program funds to take advantage of an interest rate lower than one on an existing permanent loan (no refinancing) or pay for measures in progress or completed.

ADDITIONAL LOAN CRITERIA INCLUDE:

1. No minimum loan amount; maximum of \$50,000.
2. Repayment of loans in five years or less.
3. Financing of an interest rate of 6 percent.
4. Completion of loan application and beginning of project within 90 days following approval of project by the Department of Water Resources. Failure to do this will result in revocation of the loan and require submission of a new application to the Department.
5. Providing water rights information for irrigation and geothermal projects for ascertaining legal compliance with water rights requirements.
6. Applicant must be the direct user/benefitter of conservation measures funded by this program.
7. Financing of hydroelectric projects only when found to be in the public interest.
8. Changing of fuel sources only if the change results in an increased Btu efficiency.

LOAN APPLICATION PROCESS:

1. Return completed application form to the Department of Water Resources, Statehouse Mail, Boise, Idaho 83720.
2. Agricultural sector applicants must include a current financial statement and any other financial information requested to be reviewed by the Agricultural Loan Committee.
3. Applicants will be notified in writing of projects' approval or denial based on the analysis of economic and technical feasibility by staff and, for the agricultural sector, the additional decision of the Loan Committee regarding credit rating.
4. If approved, payment amount and schedule will be calculated and promissory notes and any necessary security agreements will be provided for applicants' signatures.

EFFECTIVE DATE OF THESE GUIDELINES - JANUARY 16, 1989

OTHER CHANGES MAY OCCUR AS NECESSARY BASED ON AVAILABILITY OF FUNDS

IDAHO DEPARTMENT OF WATER RESOURCES
APPLICATION FORM
ENERGY CONSERVATION AND/OR RENEWABLE RESOURCE PROJECTS

Applicant _____
Address _____
City _____ Zip _____
Phone _____ Evening _____
Contact Person _____

Government ☐
Hospital/Health
Care/School ☐
Agriculture ☐

Estimated Total Cost _____ Amount of Loan Requested _____
Estimated Startup Date _____ Estimated Completion Date _____
Estimated Annual Energy Savings \$ _____

DESCRIPTION OF PROJECT:

Provide description adequate to determine technical and economic feasibility of project. No specific format is required. Describe existing conditions, proposed improvements, and the itemized cost of improvements. Include such things as past energy costs, system capacities, types of equipment and materials needed, building size or square footage, square footage of window/door area, fuel sources, and acreage for irrigation projects. Also provide any calculations and any other items pertinent to the project. Include drawings and diagrams as necessary. For geothermal projects provide legal descriptions. Where appropriate give brand name of equipment. Be prepared to provide additional information if requested by review staff. Please continue description on additional paper if necessary.

ESTIMATED ANNUAL SAVINGS

Conservation Measures	Estimated Cost	Electric (kWh)		Fossil Fuel		Total Dollar Savings	Simple Payback In Years
		Units Saved	Cost/kWh	Units Saved	Cost/Unit		

PROJECTS MUST COMPLY WITH APPLICABLE FEDERAL REGULATIONS, AND STATE, COUNTY OR MUNICIPAL HEALTH, BUILDING, HOUSING, FIRE PREVENTION, AND HOUSING MAINTENANCE CODES.

I hereby certify that the above information is correct to the best of my knowledge.

Please Print Name _____ Signature _____ Date _____

Return to: Idaho Department of Water Resources
Energy Resources Bureau
Statehouse Mail
Attention: Joan Sipple
Boise, ID 83720

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ATTACHMENT 3

LOCAL UNITS OF GOVERNMENT FINANCING ALTERNATIVES

A. Grants

1. Block Grants

The Community Development Block Grant program through the Idaho Department of Commerce is available to local units of government. Funding priorities change under this program and a match of 20 to 25 percent is usually required. Contact can be made with the Idaho Department of Commerce at (208) 334-3591.

2. Urban Development Action Grants

Urban Development Action Grants (UDAG) are administered by the Department of Housing and Urban Development. Communities and commercial firms in partnership with communities can apply for these grants. These funds are primarily for economic development but energy conservation programs will be considered. For additional information on UDAG, contact your local HUD office or the Department of Commerce at (208) 344-2470.

3. The U.S. Department of Energy and Bonneville Power Administration

The U.S. Department of Energy (DOE) and the Bonneville Power Administration (BPA) from time to time offer special grant programs for local units of government, institutions and commercial firms. Contact should be made to see if a specific project will fit into any of their special demonstration

programs. Contact can be made with the U.S. Department of Energy, Denver Office, at (303) 236-2000 and with the Bonneville Power Administration, Boise Office, at (208) 334-9137.

4. Other Agencies

Other agencies which offer grants from time to time for energy conservation are the Economic Development Administration (208) 334-1521, and the Farmers Home Administration (contact your local office).

5. Private Foundation Grants

Private foundations throughout the Northwest participate in administering grants through an organization called the Foundation Center which has a regional information outlet in the reference section of the Caldwell Public Library in Caldwell, Idaho. For information on the use of the "Foundation Directory," and the most recent grants administered by private foundations in Idaho, contact the Caldwell Public Library at (208) 459-3242.

B. Shared Savings and Energy Service Firms

1. Shared Savings Companies

These are firms that finance and install energy conservation equipment as well as provide management and training to staff on operations and maintenance. Shared savings agreements are becoming popular because of the small capital outlay required by the building owner.

The contractor installs the energy conservation measures in the building at his cost and will then share the savings with the building owner on an agreed upon percentage. This type of

agreement is good in the respect that if no savings occur, no money must be paid to the contractor. In this type of agreement the contractor will be on site often, as his profits depend on his equipment's performance.

One disadvantage with shared savings agreements is that if the use of the building changes, the contractor will want to change the contract. Make sure that there is some flexibility in the contract for this purpose.

2. Energy Service Companies

These firms are similar to shared savings companies in that they provide financing, equipment, and training for the conservation equipment they install. They differ in that Energy Service Companies contract for a specified portion of your energy bill to provide you with utility service at a prescribed level of comfort. The equipment is installed and maintained by the contractor at no expense to the building owner. The building owner or occupant pays the monthly contract amount in place of his regular utility bill. The contractor pays the building owner's utility bills and profits from savings above those passed on to the owner.

The advantages to energy service companies contracts are about the same as shared savings companies, no initial capital outlay, little or no maintenance cost on equipment and immediate savings reflected in the bill. Disadvantages include possible lack of control over building operation and maintenance, the owner has the shared savings, and a change in building use can change the contract conditions.

C. Leases

Leases today have many variations and can be changed to

suit just about any situation. A lease is when the lessor (a company or contractor) finances the purchase of equipment for the lessee (the building owner). The lessee pays for the equipment in monthly installments over a set period of time. The equipment is usually financed at 100 percent of the cost, and payment schedules are relatively flexible. Leases are used to avoid high initial capital outlays and the ownership of outdated or worn-out equipment. At the end of most leases the equipment can be purchased for a pre-determined price. The price can vary depending on the amount you want to pay per month.

The lease has the advantages of low up-front capital outlay, and all savings going to the building owner. The disadvantages are that if the lease is terminated, penalties can be expensive to the lessee, and an audit must be conducted and paid for by the lessee before the retrofit measures can be done.

D. Loan Programs

Loans are available from conventional commercial lending institutions and through some federal and state agencies.

1. Low Interest Energy Conservation Loans

One or more financial institutions will be selected by IDWR to administer a low interest energy loan program using funds from the Exxon Oil overcharge monies. The program will provide an opportunity to borrow low-interest funds to pay for the installation of energy conservation measures and renewable resource applications. Projects must show enough energy savings to pay off their loans in ten years or less. Details of the loan program will be publicized by the selected administrator(s) of the loan program, and by IDWR.

2. Water Resource Finance Program

Idaho Water Resource Board financial assistance programs have, and can continue to play a major role in the development and/or rehabilitation of adequate water supply facilities in Idaho. Accordingly, the purpose of the Board's finance programs is to provide water project financing at favorable interest costs and terms.

To be eligible, a water project must have as its primary purpose a water use which implements the State Water Plan. These projects may include but are not limited to the drainage or irrigation of agricultural property for economic benefit or the provision of domestic and municipal water supplies, electricity, flood control, fish and wildlife, recreation, aquaculture, water quality or reclamation.

The Idaho Water Resource Board's finance program consists of two elements:

1. The Revolving Development Account
2. The Water Management Account

The approach to obtaining a loan or grant from the Board is similar for both program elements.

For information on eligibility, fees, interest rates, etc., contact: Frank Sherman, (208) 327-7985.

APPENDIX B
PUMP TEST SUMMARIES

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PUMP TEST SUMMARY

OWNER OF PUMP: CITY OF MINIDOKA

PUMP I.D.: WELL PUMP (25-HP)

DATE OF PUMP TEST: 9/15/89

TOTAL DYNAMIC HEAD:

- A) PUMPING WATER LEVEL 235.00* FT (WATER LEVEL TO CENTER OF DISCHARGE PIPE)
- B) HEIGHT OF PRESSURE GAUGE 3.00 FT (CENTER OF DISCHARGE PIPE TO GAUGE)
- C) FRICTION LOSS 3.13 FT (PUMP INTAKE TO GAUGE)
- D) DISCHARGE PRESSURE 26.00 PSI (60.06 FT)

TOTAL DYNAMIC HEAD (A+B+C+D)= 301.19 FT

FLOW MEASUREMENT:

- | | |
|------------------|------------|
| A) COLLINS METER | 0.00 GPM |
| B) HALL METER | 236.17 GPM |
| C) ANNUBAR METER | 0.00 GPM |

INPUT HORSEPOWER:

KW= 59.9 AMP X 245.3 VOLTS X 0.81 PF X 1.732/1000= 20.61

HP=1.34 X 20.61= 27.62

OUTPUT HORSEPOWER:

HP= 236.17 GPM X 301.19 TDH / 3960= 17.96

PLANT EFFICIENCY:

EFF= OUTPUT HP / INPUT HP X 100= 65.03%

*Assumed pumping water level based upon city records.

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APPENDIX C

HOW TO MONITOR PUMP EFFICIENCY

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HOW TO MONITOR PUMP EFFICIENCY

While it is important to have your pumps operating as efficiently as possible to minimize energy costs, it is equally important to maintain high efficiencies once they have been attained. It is not too difficult to determine pumping plant efficiency yourself for many pumps, and for those where it is not easily determined there are usually enough clues to indicate decreasing efficiency. Pump efficiency should be checked annually to identify problems before they become too serious or costly. The information needed to determine pumping plant efficiency is:

- 1) Flow rate,
- 2) Discharge pressure,
- 3) Pumping water level, and
- 4) Power input.

Flow Rate

Most municipal pumps have flow meters installed in their discharge pipes. Some meters indicate instantaneous flow by means of a needle and dial. Others have flow totalizers, similar to automobile odometers, that indicate total volume of flow. Many meters give both types of flow measurements. The most accurate method of measuring flow is, when possible, to time with a stopwatch a given number of totalizer revolutions. Needle indicators have a tendency to bounce, making accurate readings difficult. By increasing or decreasing the flow meter reading according to its accuracy as given in Table 1 of this report, an accurate flow rate can be determined.

At pumping plants where no flow meters are installed, it is not possible to accurately estimate flow.

Discharge Pressure

Discharge pressure can be determined simply by reading a pressure gauge installed near the pump discharge. Gauges should be corrected for accuracy according to the gauge errors as given in Table 1 of this report. Alternatively, a new gauge can be purchased.

A gradual or sudden decrease or increase in discharge pressure can indicate a problem in the pump. On the other hand, a decrease or increase could also indicate a problem with the gauge. If changes in discharge pressure do become apparent, check the accuracy of the gauge before assuming a problem with the pump.

Pumping Water Level

Pumping water level can often be measured using an air line device which is frequently installed in municipal wells. The air line is simply a plastic or copper tube attached to the pump column and extending down the well until the bottom segment of the tube is submerged. The top end of the tube is attached to a pressure gauge. To use the line, simply pump air into it until the pressure gauge reading becomes steady and no longer rises. At this point any water that filled the submerged segment of the tube has been expelled and any additional air added will be blown out the end of the tube into the water. To determine pumping water level it is often as simple as taking a water level reading from the gauge connected to the air line. Although the gauge is just a simple pressure gauge, many are calibrated to give a water level reading in feet. Other gauges are calibrated in psi, in which a conversion to feet is necessary. The conversion is:

$$PWL = LL - 2.31 P$$

where PWL = pumping water level (ft)

LL = air line length (ft)

P = gauge pressure (psi)

Notice that the length of the air line must be known in order for a normal pressure gauge to be useful.

It is also possible, if the air line length is known, to check the accuracy of an air line gauge by using an accurate pressure gauge.

At pumping plants where no air line is installed, pumping water level can only be determined by dropping a probe into the well. For some wells this is a simple procedure, however for many wells it is quite difficult and often is impossible.

Power Input

Power input can be determined by measuring several electrical quantities from inside the electrical panel, or by timing rotations of the disk inside the utility's electric meter. Getting to the electric panel is **EXTREMELY DANGEROUS** and is **NOT RECOMMENDED**, except for trained and competent electricians. The preferred method is to use the utility's electric meter.

Two commonly encountered styles of electric meters are shown in Figure 1. Both meters are combination meters that measure energy usage in kWh and peak demand in kW. On both meters energy usage is indicated by the five small dials arranged in a semicircular pattern near the top of the meter. Each dial represents thousands, hundreds, tens, or single kilowatt hours. The kWh reading is taken from left to right. Notice that the needles on alternate dials rotate in opposite directions. In reading each dial, the small digit on either side of the needle is read. Figure 1 gives the meter reading for the meter illustrated.

Demand is indicated for the top meter by the three circular dials near the center of the meter. They are read exactly the same way as the other dials on the meter, except that a decimal point is to be inserted where the heavy black line is drawn. For the lower meter, demand is indicated by the large needle and semicircular scale around the top periphery of the meter. Demand readings are set back to zero each time the meter is read.

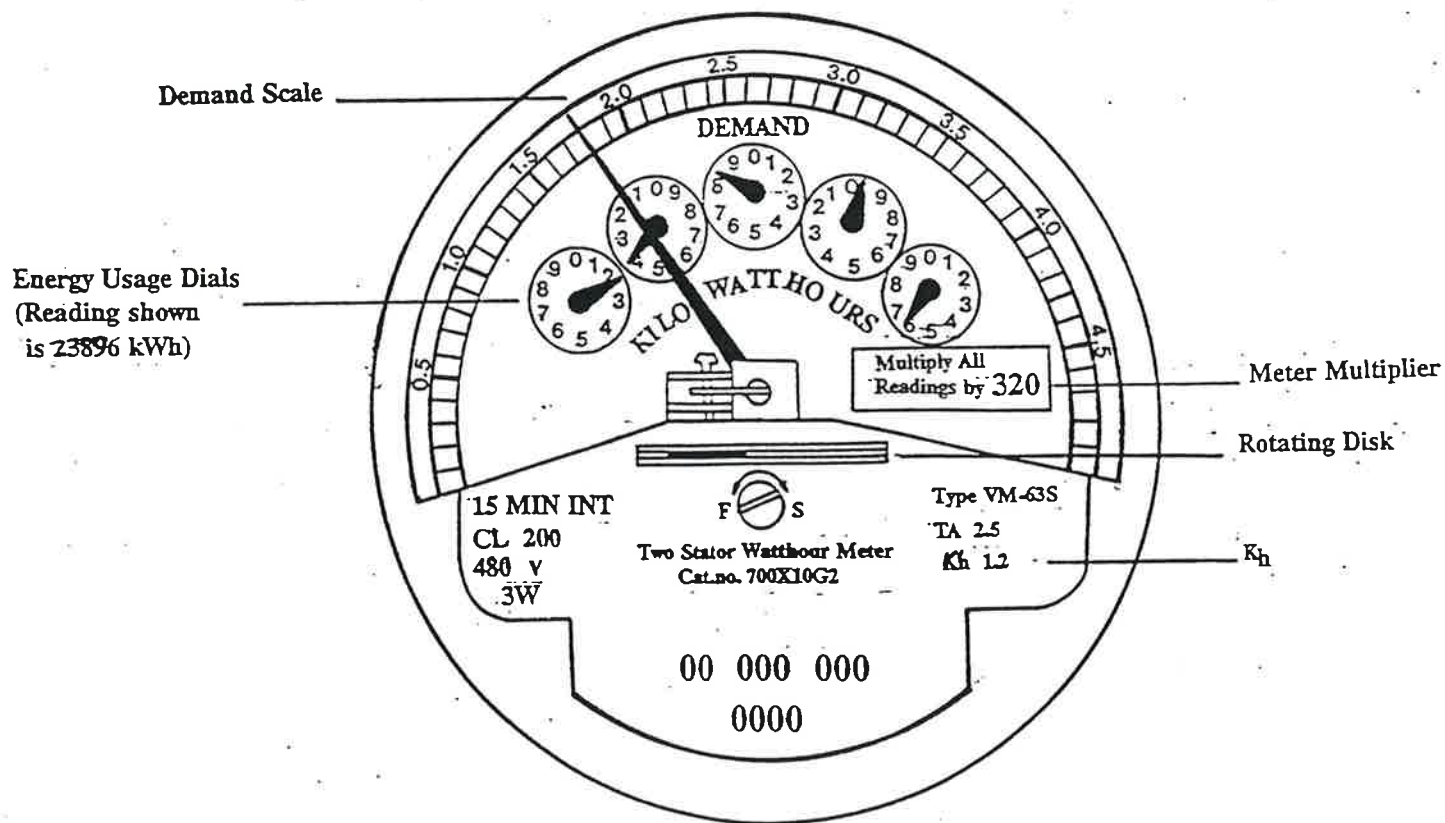
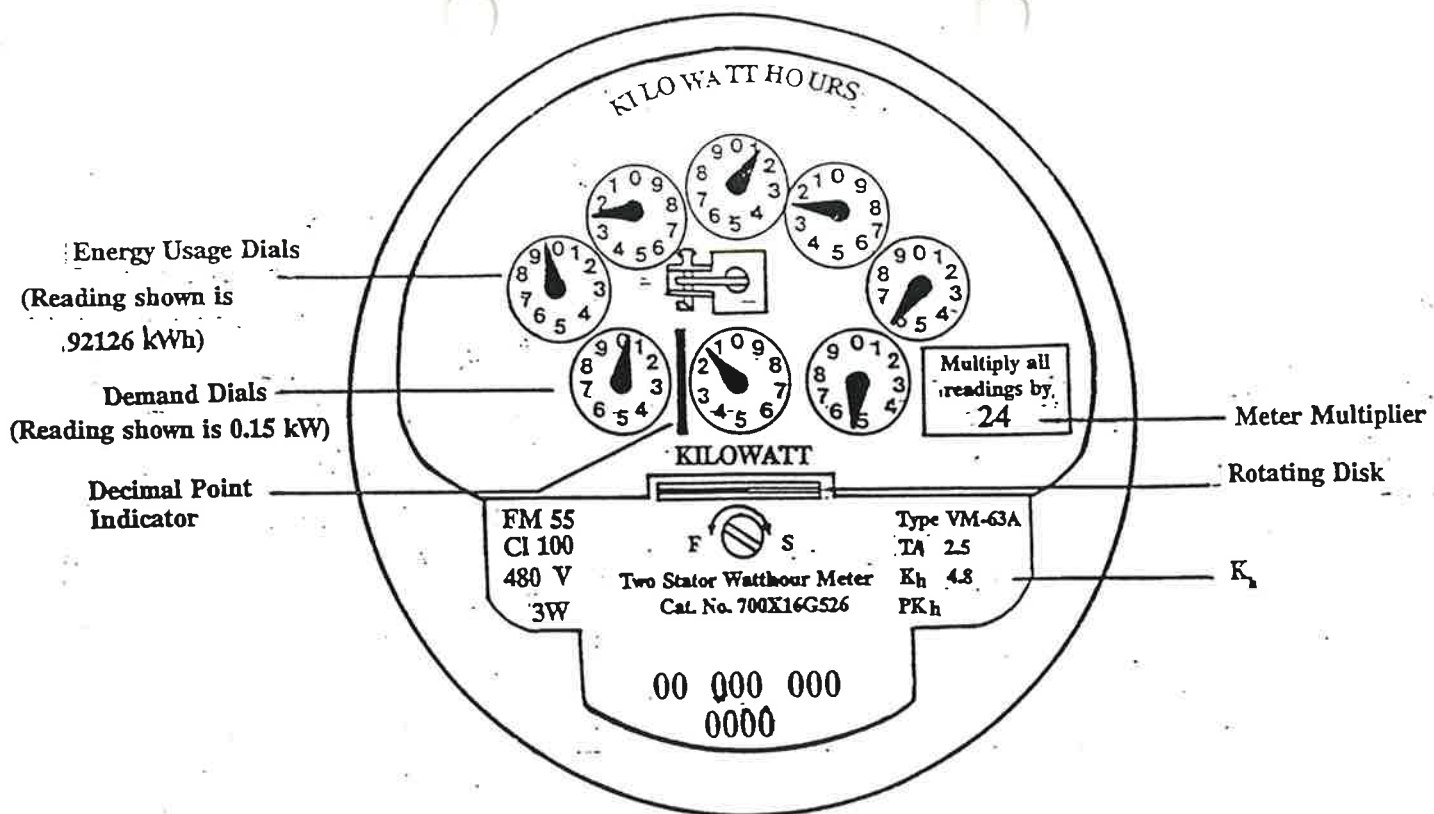


Figure 1. Two common types of electric utility demand meters

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Shown on many meters, usually on the upper right hand side of the face or in the very center of the face, is a meter multiplier. All readings obtained from the meter should be multiplied by this number if one is shown. Meter multipliers are usually 20, 40, 60, 80 or 120.

One of the most useful items in an electric meter as far as the customer is concerned is the thin disk that rotates as energy is used. The disk rotates faster or slower depending upon the rate at which energy is being used. The disk can usually be seen through a thin slot in the meter face, located $\frac{1}{3}$ to $\frac{1}{2}$ the distance from the bottom of the meter. One segment of the edge of the disk is painted black so that the speed of rotation can be judged. To determine the present rate of power consumption, measure the time it takes for a given number of revolutions. It is not critical how many revolutions are timed, but the elapsed time should be more than about 20 seconds. Ten to twenty revolutions is usually enough for an accurate measurement.

The final item of information that must be obtained from the electric meter is the meter disk constant, Kh. The value of Kh is usually shown on the mid to lower right hand side of the meter face.

Once you have timed the meter disk, determined the meter multiplier and the meter disk constant, it is a matter of simple multiplication to get power input. Power input in kilowatts is computed as follows:

$$\text{kW} = 3.6 \times \text{Kh} \times \text{meter multiplier} \times \frac{\text{\# of revolutions}}{\text{time for revolutions}}$$

To convert to horsepower, use:

$$\text{hp} = \text{kW} \times 1.34$$

(On some meters, a meter multiplier will be shown for use with the kilowatt-hours dials and the kilowatt dials, but it should not be used for power input computations.)

Computing Efficiency

Once the necessary data have been gathered, an overall pumping plant efficiency or "water to wire" efficiency can be computed. The equation to use is:

$$\text{Eff} = \frac{QH}{39.6P}$$

where Eff = Pumping plant efficiency (%)
Q = Flow rate (gpm)
H = Total dynamic head (ft)
P = Power input (hp)

The total dynamic head represents the energy that must be provided by the pump to deliver one pound of water at a specified pressure. It is measured in feet, and can be estimated as:

$$H = \text{PWL} + 2.31 \text{ DP}$$

where H = Total dynamic head (ft)
PWL = Pumping water level (ft)
DP = Discharge pressure (psi)

To be entirely correct, minor hydraulic losses within the pump should be included in the total dynamic head estimate. These are losses due to valves, bends, pipe and column friction, well screen, and other flow obstructions. In most pumps they are not too significant. Typically they would add about two percent to the total dynamic head estimate given above.

Indications of Decreasing Efficiency

Although a complete check of efficiency is recommended, it may not always be possible. In those instances, there are some things to watch that can indicate a decrease in pump efficiency. Sudden or gradual changes in any of the items listed below could indicate a problem.

1. Flow rate
2. Discharge pressure
3. Electrical demand
4. Monthly energy usage
5. Hours of pump operation

If you have questions about how to monitor efficiency, or would be interested in receiving training, contact the Department of Water Resources.

R PROOF



CVR



MAPS



PHOTOS



MISC



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Water Right Number - 836-04203

Prefix Translation: RESEARCH

Old (D) Number -

+ - - - - Last Name - - - - + + - First Name - - + + - - - - - Address - - - - - +

*** C - CURRENT OWNER ***
UNION PACIFIC RAILROAD CO1 - 1416 DODGE ST
2 -
3 -
City- OMAHA
Phone - 402-271-3728

State- NE Zip- 68179

*** R - REPRESENTATIVE ***
NELSON

JACK L.

1 - 1416 DODGE STREET
2 -
3 -
City- OMAHA
Phone - 402-271-2347

State- NE Zip- 68179

+ - - Priority Date - - + + - - Region - - - + + - - Stage - - - + + - - Status - - - - +
09/13/1957 17 SOUTHERN J - BENEFICIAL USE+ - - - - Source - - - - - + + - - - - - Tributary - - - - - +
GROUNDWATER

Tw	Rng	Sec	Tract	Lot	RFlg	County
08S	25E	1	NW NW SW SE NW SW		(67) (67)	MINIDOKA MINIDOKA

Code	Description	Period From	Period To	Diversion Rate	Diversion Volume
40 - MUNICIPAL		01/01	12/31	0.220	
43 - DOMESTIC		01/01	12/31	0.100	
10 - COMMERCIAL		01/01	12/31	0.030	

+ - Total Div. Rate - + + - Total Div. Volume - + + - Total Consumptive Use - + + - KW Usage - +
0.220 0.0

Tw	Rng	Sec	Tract	Lot	Acres	Code	Description	County
08S	25E	2	NW SE			10	COMMERCIAL	(67) MINIDOKA
08S	25E	1	NE SW			43	DOMESTIC	(67) MINIDOKA
08S	25E	2	SE SE			43	DOMESTIC	(67) MINIDOKA

Total Acres:

+ - - Diversion Means - 2 WELLS, 20 & 25 HP

+ - - Non-Irrigation Use - MUN,CITY OF MINIDOKA;DOM,5 HOMES;COMM,BEET DUMP, GRAINERY, DEPOT

+ - - Other Rights for Same Use - 36-04204

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FEB 0 1 1993Verified
HHT

Water right number - R36-04203

Prefix Translation: RESEARCH

+ - - - - - Remarks - - - - - +

PLACE OF USE IS LANDS WITHIN CITY LIMITS OF MINIDOKA.
RIGHT NO. 36-04204 IS ALSO DIVERTED THROUGH POINTS OF DIVERSION
DESCRIBED ABOVE, AND THE TOTAL COMBINED RATE OF DIVERSION OF
THESE RIGHTS IS LIMITED TO .55 CFS AND A COMBINED TOTAL
CONSUMPTIVE USE VOLUME OF 51 AFA.

+ - - - - - Old Water Right Numbers - - - - - +

No Old Water Right Numbers Found

+ - - - - - Conditions of Approval - - - - - +

C03 - RIGHT INCLUDES ACCOMPLISHED CHANGE IN POINT OF DIVERSION PURSUANT
- TO IDAHO CODE 42-1416A.
C04 - RIGHT INCLUDES ACCOMPLISHED CHANGE IN PURPOSE OF USE PURSUANT TO
- IDAHO CODE 42-1416A.
C05 - RIGHT INCLUDES ACCOMPLISHED CHANGE IN PLACE OF USE PURSUANT TO
- IDAHO CODE 42-1416A.

+ - - - Decree Plaintiff - - - +

+ - - - - Decree Defendant - - - +

+ - Decree Date - +
00/00/0000

+ - - - - - Comments - - - - - +

Date: 02/06/1992 User Id: THORNTON Subject: COPIED FROM REMARKS
ALL WATER FACILITIES WERE DONATED TO THE CITY OF MINIDOKA EXCEPT
BY A LEASE AGREEMENT WITH THE CITY AND MADE A PART OF THE CITY'S
AND SECTION HOUSES.
DOMESTIC AND MUNICIPAL USE ON APRIL 11, 1957.

THE WELL. FACILITIES AND WELL ON THE RIGHT-OF-WAY ARE COVERED
MUNICIPAL WATER SYSTEM. WATER IS ALSO USED IN OUR DEPOT BLDG.
WATER USE CHANGED FORM STEAM ENGINE AND STATION USE TO STATION,

Date: 02/06/1992 User Id: THORNTON Subject: CLAIM REVIEW
THIS CLAIM, AND A36-04204 WERE CLAIMED BY UNION PACIFIC RAILROAD
TOTAL. REVIEW BY LEGAL STAFF DETERMINED THE WATER RIGHTS WERE
OF ONE OF THE WELLS ON UP PROPERTY BUT USE OF A WELL OWNED BY THE
BE A CHANGE IN THE POINT OF DIVERSION, BUT THE OWNERSHIP OF THE
TION INCLUDES 2 POINTS OF DIVERSION - ONE ON UP PROPERTY, THE

COMPANY. THE CITY OF MINIDOKA ALSO CLAIMED THESE 243 CLAIMS IN
LEASED BY UP TO THE CITY, AND UP OWNED THE RIGHTS. THE DISUSE
CITY TO DIVERT THE SAME QUANTITY OF WATER HAS BEEN DETERMINED TO
WATER RIGHTS TO BE RETAINED BY UP. THEREFORE, THIS RECOMMENDA-
OTHER ON CITY PROPERTY.

+ - - Audit Fields - - +

06/03/92 THORNTON

+ - - - - - Adjudication Rights Dates and Flags Area - - - - - +

Court Report Filing	- 00/00/0000	Field Inspection Made	- 01/15/1992	Civil Case Number	- 39576
Objection Filed Date	- 00/00/0000	Field Inspection Flag	-	Old Case Number	-
Response Filed Date	- 00/00/0000	Verified Date	- 06/03/1992	Old Judicial District	-
Claim Received Date	- 05/31/1989	Last Amended Date	- 00/00/0000	Temporary Right	- P
		Receipt Number	- C007120	Water District	-
		POU Ownership Flag	- Y	Federal/State Indicator	- S
		Name Connector	- OR	Presumption Flag	- C
				Notice of Error Flag	-

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CLAIM NO. A36 - 04203

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
CLAIM VERIFICATION EXAM SHEET
FOR SMALL INDUSTRIAL AND COMMERCIAL CLAIMS IN PLACE OF A CVR

1. ☒ No Change NAME:
NEW OWNER: _____
☐ No Change ADDRESS: _____
☐ NEW ADDRESS: _____
☒ DATA ENTRY STANDARDS CHECKED?
2. ☒ No Change - DATE OF PRIORITY:
(EVIDENCE OF PRIORITY REQUIRED) ☒ Proof in File
☐ Claimant Contact if Not
☐ CHANGE- Priority date, per claimant, is _____
(if the priority date, based on your exam, seems questionable,
explain in COMMENTS.)
3. ☒ No Change - SOURCE:
☐ CHANGE - Different Source found: _____
4. ☐ No Change - POINT OF DIVERSION:
☒ Point of diversion is different than the claim 2pts -
New P/D: Twp. 8S, Rge. 25E, Sec. 1, NW 1/4 NW 1/4 SW 1/4
8S 25E 1 SE NW SW
- Note: If the 10-acre tract is shown on the claim, then
verification of the 10-acre parcel is needed. Otherwise the
10-acre tract is not required, unless the source is a spring.
5. ☐ No Change - DESCRIPTION OF DIVERTING WORKS:
☒ Complete items missing, IF KNOWN. 2 wells
HP of pump 20 HP Static water level _____ Well depth _____
Casing size 25 HP Pumping water level _____ Gravity flow _____

GROUNDWATER MEASUREMENT REQUIREMENT ANALYSIS

THEORETICAL RATE OF FLOW: $Q = \frac{(8.8) \times (H.P.) \times (EFF.)}{TDH}$

Q = CFS

H.P. = Total Brake Horsepower of pumping plant (including booster)

EFF. = Pumping plant efficiency (ASSUME 70% OR 0.70)

TDH = total dynamic head = [(LIFT) + (PSI X 2.31)]

LIFT = depth to water in FEET from land surface to pumping
water level

PSI = pumping pressure measured in psi near pump
(if open discharge assume zero [0])

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$$Q = \frac{(8.8) \quad (\dots \overset{20}{\dots}) \quad (0.70)}{[(\dots \overset{195}{\dots}) + (\dots \overset{35}{\dots} \times 2.31)]} = \underline{\underline{.446 \quad \sim .45 cfs}}$$

LIFT FROM:

measurement ()

owner ()

area estimate ()

well logs ()

Booster (Y) (N)

PSI FROM:

measurement ()

owner ()

estimate ()

owner gage ()

NOTES ON PUMP:

Motor Make, Serial or ID

Pump Make, Serial or ID, rating

REMARKS

2 wells - above theoretical for well identified as Well B/C.
 Measurement for well identified as Well D obtained by IDWR Energy
 Division (see attached booklet).

DESCRIPTION OF USE: (Fully describe type, time & all aspects of Use)

Both wells are used in a common system.

CALCULATE VOLUMES: (time)X(rate)= Vol. N/A

Municipal use - Consumptive Use

Per review & discussion w/ Allen Merritt's review of NAPP photo,
 it has been determined there are approximately 17 irrigated acres
 within the boundaries.

$$17 \text{ acres} \times 3.0 \text{ AF} = 51 \text{ AFA}$$

(combined w/ A36-04204)

6. ☐ No Change - WATER USES:
RECOMMENDED USES:

Municipal 1-1 12-31 .33 div cons
Use Domestic From 1-1 To 12-31 Amount .10 cfs _____ af _____ af
Use Commercial From 1-1 To 12-31 Amount .03 cfs _____ af _____ af
total .33

☐ DATA ENTRY STANDARDS CHECKED FOR ITEMS 6, 7, 8 AND 9.

10. ☐ No Change - PLACE OF USE: (If changed, list below.)
Use Twp. Rge. Sec. 1/4, 1/4, 1/4

Municipal _____
Domestic 8S 2SE 1 _____ NE SW Sec. 2 SESE
Commercial 8S 2SE 2 _____ NW SE

13. ☐ No change - OTHER RIGHTS FOR SAME USE:
CHANGE: 36-04204

14. ☐ REMARKS AND CONDITIONS
(copy existing remarks to comments in "R")
☒ LIST STANDARD REMARKS FOR THE RECOMMENDATION: ☐ NONE

J03 E07

by and combined cons. use of 51
☐ LIST STANDARD CONDITIONS FOR THE RECOMMENDATION: ☐ NONE

C03 C04 C05

15. ☒ BASIS OF CLAIM VERIFIED AS: D - L - P - S - J (circle one)

COMMENTS: (pertinent to field examination)

See attached conversational memo re. uses outside city limits.
Commercial, Beet Dump, Grainery, railroad dept bathrooms and spigot
Domestic, 5 homes (.02 cfs/home)
Commercial 4 bathrooms, 1 drinking spigot
400 gpd/toilet = $\frac{1600 \text{ gpd}}{54000} = .03 \text{ cfs}$

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ATTACHMENTS: Attached to This Form. Attachments are in Permit File.

PHOTOS

MAP

SYSTEM DIAGRAM

DATE EXAM CONDUCTED:

1/15/925/28/92

ACCOMPANIED BY:

Wayne Crystal

FIELD EXAMINER:

Helen Harrington-Thomson

SIGNATURE:

Helen Harrington-Thomson

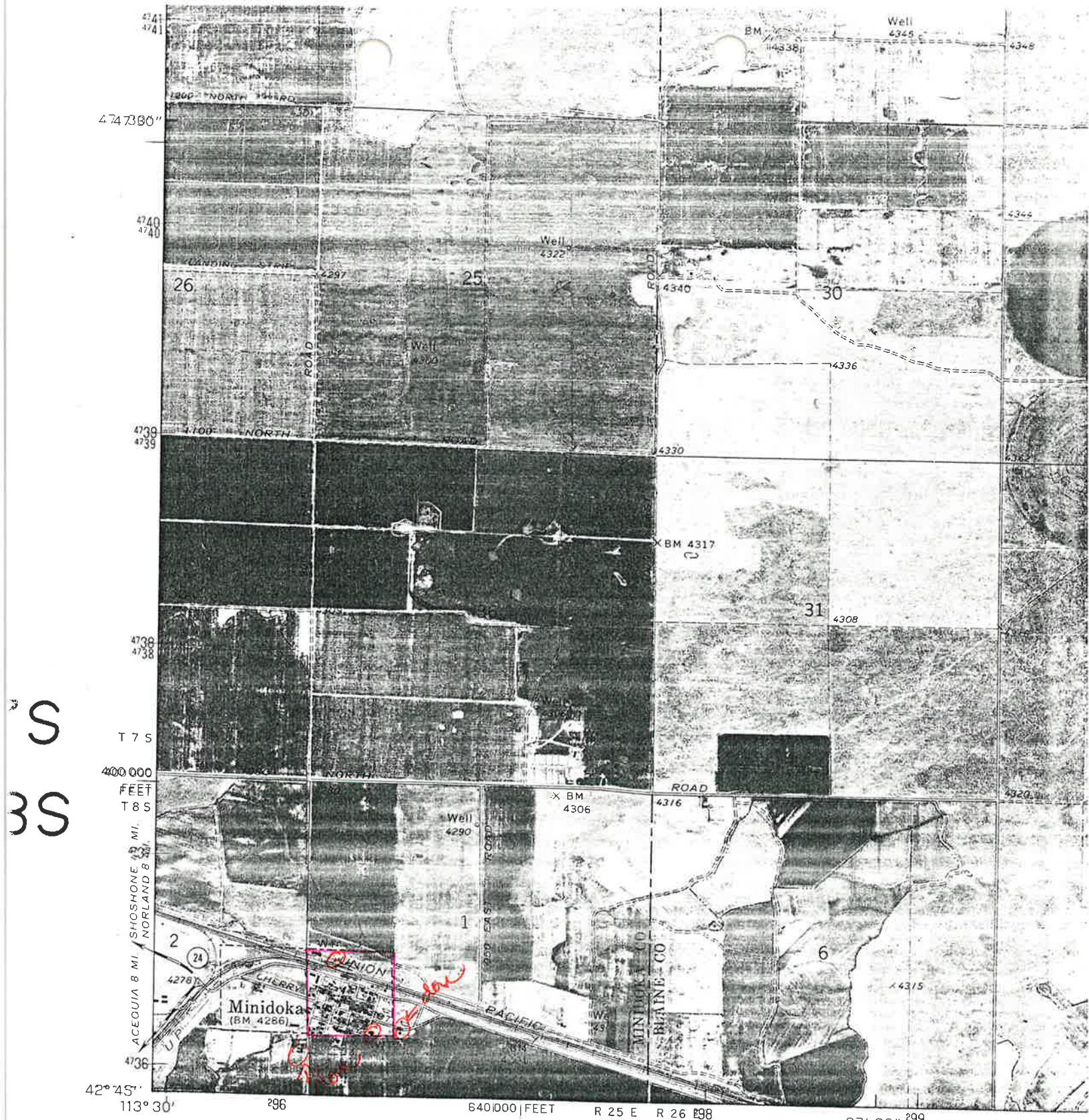
REVIEWED BY/DATE:

HHT 6/2/92

DATA ENTRY BY/DATE:

HHT 6/3/92

VERIFICATION BY/DATE:



Produced by the Geological Survey
in cooperation with the Soil Conservation Service

Orthophotograph prepared from 1:78,000-scale
aerial photographs taken August 4, 1979

Projection and 10,000-foot grid ticks
Idaho coordinate system, central zone
(transverse Mercator)

1000-meter Universal Transverse Mercator grid ticks,
zone 12. 1927 North American datum

Photom imagery rectified by optical scanning
Where double or mismatched image occurs use the
mean of image position for map point

R25E

R26E

THIS MAP
FOR SALE BY U

1/15/92

Union Pacific well
south of well described
in A36-04204, approx. 40'.

(see memo dated 6/2/92,
this well described as
Well A.) HHT

1

1



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1/15/92 HJT

Union Pacific - Minidoka

Pumphouse and
disused water tower

(See memo, dated 6/2/92,
this well described as
Well B/C.)



Bowls previously pulled; still
in pumphouse



Pump and piping



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SRBA claims A36-04203, 04204
.5/92 HHT

Well located on City of
Minidoka property.
Identified in memo
dated 6/2/92 as
Well D.



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3/30/92

HELEN:

Look, I even
found some
pictures.

CALL ME.

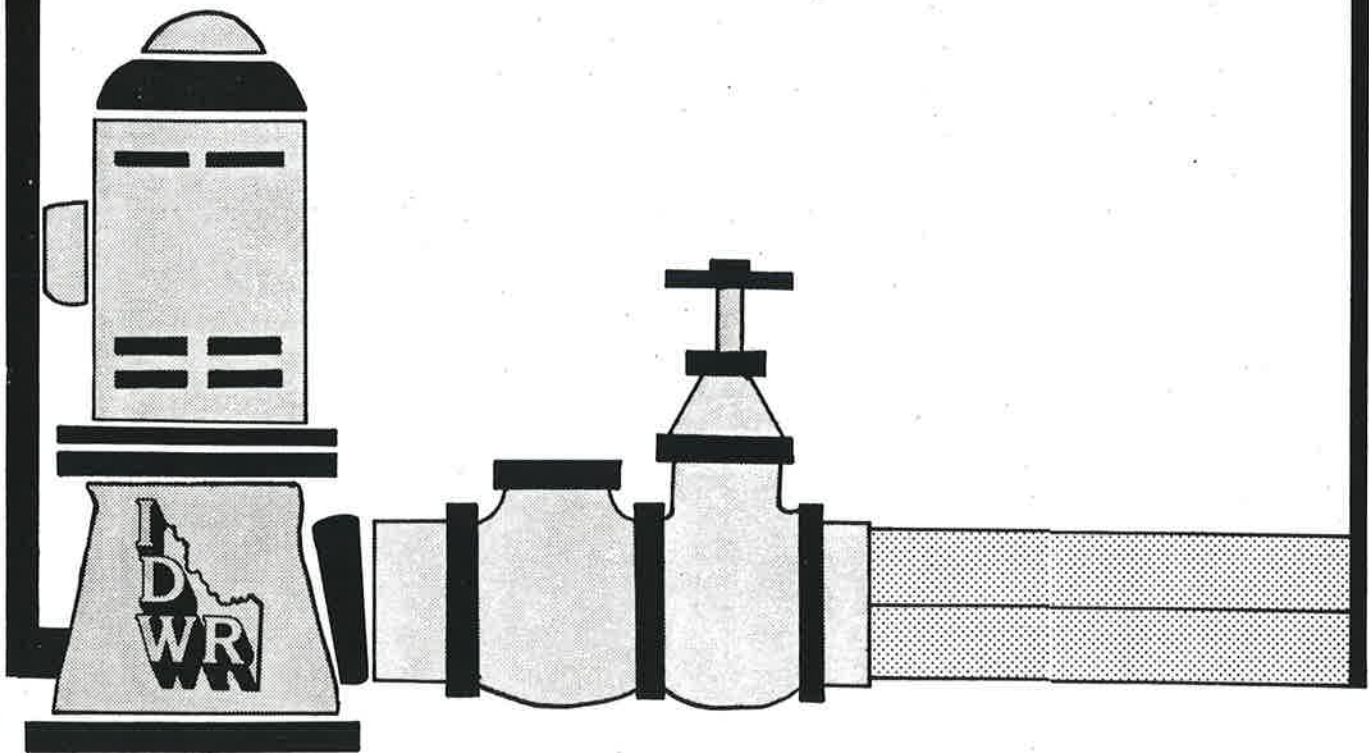
Jack

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see memo
A36-04203, dated
6/2/92, this well
identified as well D.
H H T

ENERGY EFFICIENCY EVALUATIONS
FOR PUMPS
IN THE
CITY OF MINIDOKA, IDAHO



Idaho Department of Water Resources
Energy Division

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ENERGY EFFICIENCY EVALUATIONS
FOR PUMPS
IN THE
CITY OF MINIDOKA, IDAHO

Prepared by
Scott King
Rick Sterling, P.E.

Idaho Department of Water Resources
Boise, Idaho

February 1991

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TABLE 1

CITY OF MINIDOKA
MUNICIPAL WATER WELL DATA

<u>PUMP ID</u>	<u>FLOW RATE (GPM)</u>			<u>DISCHARGE PRESSURE (PSI)</u>		
	<u>IDWR</u>	<u>CITY</u>	<u>% DIFFERENCE</u>	<u>IDWR</u>	<u>CITY</u>	<u>% DIFFERENCE</u>
WELL PUMP	236.2	—	—	26	—	—

	<u>AIR LINE LENGTH (FT)</u>	<u>AIR LINE PRESSURE (PSI)</u>		<u>AIR LINE WATER LEVEL (FT)</u>		<u>STEEL TAPE WATER LEVEL (FT)</u>	
		<u>STATIC</u>	<u>PUMPING</u>	<u>STATIC</u>	<u>PUMPING</u>	<u>STATIC</u>	<u>PUMPING</u>
WELL PUMP	—	—	—	—	—	—	235*

* Assumed pumping water level based upon city records.

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PUMP TEST SUMMARY

OWNER OF PUMP: CITY OF MINIDOKA

PUMP I.D.: WELL PUMP (25-HP)

DATE OF PUMP TEST: 9/15/89

TOTAL DYNAMIC HEAD:

- A) PUMPING WATER LEVEL 235.00* FT (WATER LEVEL TO CENTER OF DISCHARGE PIPE)
- B) HEIGHT OF PRESSURE GAUGE 3.00 FT (CENTER OF DISCHARGE PIPE TO GAUGE)
- C) FRICTION LOSS 3.13 FT (PUMP INTAKE TO GAUGE)
- D) DISCHARGE PRESSURE 26.00 PSI (60.06 FT)

TOTAL DYNAMIC HEAD (A+B+C+D)= 301.19 FT

FLOW MEASUREMENT:

- | | |
|------------------|------------|
| A) COLLINS METER | 0.00 GPM |
| B) HALL METER | 236.17 GPM |
| C) ANNUBAR METER | 0.00 GPM |

INPUT HORSEPOWER:

KW= 59.9 AMP X 245.3 VOLTS X 0.81 PF X 1.732/1000= 20.61

HP=1.34 X 20.61= 27.62

OUTPUT HORSEPOWER:

HP= 236.17 GPM X 301.19 TDH / 3960= 17.96

PLANT EFFICIENCY:

EFF= OUTPUT HP / INPUT HP X 100= 65.03%

*Assumed pumping water level based upon city records.

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MEMORANDUM

Attachments, photos and
d & documents are located
in A36-04203

To: FILES--A36-04203, A36-04204
A36-04203A, A36-04204A

From: Helen Harrington-Thornton

Date: June 2, 1992

Subject: Review of SRBA Claims - Used for Municipal Purposes by
City of Minidoka

=====

There are four claims filed for the municipal use at Minidoka:

A)A36-04203 (15HP)	.22 cfs	9/13/1957	Union Pacific RR Co.
B)A36-04203A (20HP)	.22 cfs	9/13/1957	City of Minidoka
C)A36-04204 (20HP)	.33 cfs	8/18/1903	Union Pacific RR Co.
D)A36-04204A (25HP)	.33 cfs	8/18/1903	City of Minidoka

Field examination has determined that there are in fact three wells. Two wells are located on Union Pacific RR property and one other well located at the SENWSW, S. 1, T8S, R25E.

RE: Wells on UP Property

One well is in use and is a 20 HP GE Induction Motor. It is used to supplement the other working well and is located inside a pumphouse. A theoretical calculation was made and determined a potential capacity of .45 cfs (see CVR).

The second well is not in working condition and based on conversations with the city water maintenance worker and the city clerk the well has not been in use for at least 15 years. There is a 15 HP pump at the well head, which is located in the open next to the RR tracks.

RE: Well on City Property

This well has a 25 HP US Asbestos Protected motor and is located inside a pumphouse next to the city storage tank. This well was tested by the IDWR Energy Division for an energy audit and found to have a capacity of 236.2 gpm (.53 cfs).

It has been determined that there were only three wells actually claimed; the four claims mentioned above actually describe three wells: A, B, and D -- B and C are the same well.

The two working wells are B/C and D.

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Ownership of Water Rights

A copy of the lease between Union Pacific RR and the City of Minidoka was obtained from Jack Nelson, Union Pacific RR Real Estate Specialist. The lease and other documentation was submitted to Lynn Krogh-Hampe and Dan Steckel of IDWR Legal Office. According to Lynn:

The lease doesn't appear to say anything about leasing water rights. However, the only way the city can claim the priority established by the railroad is if the city is using a right that belongs to the railroad. Any claim by the city must be considered a new beneficial use appropriation commencing when the city's use commenced.

A letter to David Haley, attorney for City of Minidoka, dated 3-24-92, did not elicit any response or amendment to the City of Minidoka claims (copy attached). I discussed with Mr. Haley the possibility of additional beneficial use claims based on the drilling of the well on city property, but I never heard from him. Therefore, the two claims made by the City of Minidoka are recommended for disallowal.

The two claims made by Union Pacific Railroad Co. are being recommended with the points of diversion of the two working wells. Although one of the wells is not located on UP property, the water rights held by UP and leased by City of Minidoka are for a total diversion rate of .55 cfs (historic diversion rate supported by documents supplied by Union Pacific RR). The city has continued to lease the water rights from Union Pacific without any notification of disuse, therefore, the point of diversion located off UP property is being viewed as an unrecorded transfer of the point of diversion of the Union Pacific water rights.

All supporting documents, photos, and memos are located in A36-04203.

City of Minidoka Contacts: Wayne Crystal, Water Maintenance Worker
531-5621, or (Post Office) 531-4101
Dionne Faucet, City Clerk
532-4575 (home)

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Wells Used By City of Minidoka

6/2/92 HHT

Well A

Byron Jackson Turbine 15 HP

Model 9F138

Booster pump - Allis Chalmers 20HP

Frame No. 326 N3449-15

Unused - pump
seized up

Well B/C

GE Induction 20HP

Model 9F385

Frame 5104 Type KF

Well D

US Asbestos Protected Motor 25HP

1100478

Above information obtained during field examination
1/15/92, HHT

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MEMORANDUM

TO: HELEN HARRINGTON-THORNTON
FROM: DAN STECKEL
DATE: APRIL 21, 1992
RE: LEASED WATER RIGHT OWNERSHIP

FACTS: Union pacific R.R. has been leasing wells and water to the City of Minidoka since 1957.

ISSUE: Who owns the water right?

CONCLUSION AND DISCUSSION: The R.R. retains the water right. The water right has never been transferred, abandoned, or forfeited. The City's right is based on a private contract agreement for the use of the water and wells, not for ownership.

NOTE: Perhaps the parties should have filed for a change in use (for the municipal use) and/or for a change in point of diversion (for the new well).

The lease doesn't appear to say anything about leasing water rights. However, the only way the city can claim the priority established by the RR is if the city is using a right that belongs to the RR. Any claim by the city must be considered a new appropriation arising as of the date of beneficial use appropriation commencing when the city's use commenced.

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MEMORANDUM

To: Lynn Krough-Hampe
From: Helen Harrington-Thornton ^{HHT}
Date: April 3, 1992
Subject: Question: Is the Water Right Leased?

=====

Please review the attached lease and Memorandum of Gift between Union Pacific Railroad Co. and the City of Minidoka.

Question: Is the water right itself leased?

I see in Sections 18 and 19 of the Special Provisions of the lease there are specific mention of the "well leased hereunder" and "the Lessor's well".

Who owns the water right?

The City of Minidoka has two wells of their own and have claimed the same 243 claims as their basis of claim as the Union Pacific has. The original 243 claims were filed by Union Pacific. One of the Union Pacific wells hasn't been used in over 15 years and is unusable at the present time.

If the city indeed leases the water right, and the city has let one of the Union Pacific wells go into disrepair, is it possible that the Union Pacific water right is now diverted from one of the city wells?

Thanks.

(re: A36-04203, A36-04204, A36-04203A, A36-04204A)

*Lynn- also attached are a couple of riders - one renewal
and one extension*

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No.

Audit No.

L&T

No. 15889

LEASE

U. P. R. R. Co. Lease

Audit No. A

80215

Date.

THIS AGREEMENT, made and entered into this

13th

day of

September

19 57

Parties.

by and between OREGON SHORT LINE RAILROAD COMPANY

a corporation of the State of Utah, and its Lessee, UNION PACIFIC RAILROAD COMPANY, a corporation of the State of Utah (hereinafter collectively called "Lessor"), parties of the first part, and VILLAGE OF MINIDOKA, a municipal corporation of the State of Idaho

(hereinafter called "Lessee"), party of the second part, WITNESSETH:

Term.

Section 1. The Lessor, for and in consideration of the covenants and payments hereinafter mentioned to be performed and made by the Lessee, hereby agrees to lease and let and does hereby lease and let unto the Lessee for a term beginning on the 1st day of July 1957, and extending to and including the 30th day of June 1962, unless sooner terminated as herein provided, the portion of the premises

Location.

of the Lessor

at Minidoka

Minidoka County, Idaho shown in yellow, green and pink

on the plat, or described in the description, or both, hereto attached and made a part hereof; RESERVING, however, to the Lessor the right to place and maintain at prominent places on the leased premises signs advertising Union Pacific Railroad.

Rental.

Section 2. The Lessee agrees to pay for the use of said premises rental at the rate of

FIVE AND NO/100-
for the term hereof

Dollars (\$5.00) per

year, payable to Union Pacific Railroad Company in advance. Acceptance of said rental in advance by the Lessor shall not act as a waiver of its right to terminate this lease as hereinafter provided. It is agreed that no improvements placed upon the leased premises by the Lessee shall become a part of the realty and the Lessee agrees to pay, before the same become delinquent, all taxes and all assessments levied and assessed during the continuance of this lease upon any buildings and other improvements placed upon the leased premises.

Use of Leased Premises.

Section 3. The Lessee covenants that the leased premises shall not be used for any other purpose than for

- Water tank site, pumphouse site and site for water lines -

Abandonment.

the Lessee abandons the leased premises, the Lessor may enter upon and take possession of the same and that a nonuser for the purpose mentioned continuing for thirty days shall be sufficient and conclusive evidence of such abandonment.

Lessee Not to Sublet or Assign.

Section 4. The Lessee agrees not to let or sublet the leased premises, in whole or in part, or to assign this lease without the consent in writing of the Lessor, and it is agreed that any transfer or assignment of this lease, whether voluntary, by operation of law or otherwise, without such consent in writing, shall be absolutely void and, at the option of the Lessor, shall terminate this lease.

Use for Unlawful Purposes Prohibited. Indemnity.

Section 5. It is especially covenanted and agreed that the use of the leased premises or any part thereof for any unlawful or immoral purposes whatsoever is expressly prohibited; that the Lessee shall hold harmless the Lessor and the leased premises from any and all liens, fines, damages, penalties, forfeitures or judgments in any manner accruing by reason of the use or occupation of said premises by the Lessee; and that the Lessee shall at all times protect the Lessor and the leased premises from all injury, damage or loss by reason of the occupation of the leased premises by the Lessee, or from any cause whatsoever growing out of said Lessee's use thereof.

Care of Premises and Improvements.

Section 6. The Lessee hereby covenants and agrees that any and all buildings erected upon the leased premises shall be painted by the Lessee a color satisfactory to the Lessor, and shall at all times be kept in good repair; that the roof of each such building shall be of fire-resistive material; that when such buildings are without solid foundation the openings between the ground and the floor thereof shall be covered with fire-resistive material; that the leased premises shall during the continuance of this lease be kept by the Lessee in a neat and tidy condition and free from all straw, rubbish, or other material which would tend to increase the risk of fire, or give the leased premises an untidy appearance; that none of the buildings or other structures erected on said premises shall be used for displaying circus posters or any signs or advertisements other than such notices and signs as may be connected with the business of the Lessee, and that such signs and notices shall be neat and shall be properly maintained. In the event any building or other improvement not belonging to the Lessor on the leased premises is damaged or destroyed by fire, storm or other casualty the Lessee shall, within thirty days after such happening, remove all debris and rubbish resulting therefrom; and if the Lessee fails so to do the Lessor may enter the leased premises and remove such debris and rubbish, and the Lessee agrees to reimburse the Lessor, within thirty days after bill rendered, for the expense so incurred.

FEB 01 1993

L. 22.

Section 7. The Lessee shall, when due and before any lien shall attach to the leased premises if the same may lawfully be asserted, pay all charges for water, gas, light and power furnished the leased premises, and fully pay for all materials joined or affixed to said premises, and shall pay in full all persons who perform labor upon said premises, and shall not permit or suffer any mechanic's or materialman's or other lien of any kind or nature to be enforced against said premises for any work done or materials furnished thereon at the instance or request or on behalf of the Lessee; and the Lessee agrees to indemnify and hold harmless the Lessor and its property from and against any and all liens, claims, demands, costs and expenses of whatsoever nature in any way connected with or growing out of such work done, labor performed, or materials or other things furnished.

Clearances.

Section 8. No building, platform or other structure shall be erected or maintained and no material or obstruction of any kind or character shall be placed, piled, stored, stacked or maintained closer than eight (8) feet six (6) inches to the center line of the nearest track of the Lessor; PROVIDED, however, that in the case of platforms not higher than four (4) feet above the top of the rail a minimum clearance of seven (7) feet three (3) inches from the center line of the nearest track of the Lessor will be permitted; and PROVIDED further that along and adjacent to and for one car length beyond those portions of track having a curvature greater than ten (10) degrees the clearances hereinbefore provided shall, with reference to platforms four (4) feet or less in height, be increased horizontally six (6) inches, and with reference to all buildings, platforms, structures and other obstructions greater than four (4) feet in height shall be increased horizontally one (1) foot; and PROVIDED further that if by statute or order of competent public authority greater clearances shall be required than those provided for in this Section 8, then the Lessee shall strictly comply with such statute or order. All doors, windows or gates shall be of the sliding type or shall open toward the inside of the building or enclosure when such building or enclosure is so located that the said doors, windows or gates if opening outward, would, when opened, impair the clearances in this section prescribed.

Explosives and Inflammables.

Section 9. It is further agreed that no gunpowder, gasoline, dynamite, or other explosives or inflammable material shall be stored or kept upon the leased premises. Nothing herein contained, however, shall prevent the storage of oil or gasoline upon the leased premises when the purpose for which the same are to be used, as indicated by Section 3 hereof, contemplates such storage; nor the storage of oil or gasoline where same are used by the Lessee for fuel in the business carried on by the Lessee on the leased premises, and are stored in quantities reasonable for such purposes; PROVIDED, however, that in all of said excepted cases, the Lessee shall strictly comply with all statutory and municipal regulations relating to the storage of such commodities.

No Construction by Lessee Over or Under Tracks.

Section 10. The Lessee shall not locate or permit the location or erection of any poles upon the property of the Lessor, nor of any beams, pipes, wires, structures or other obstruction over or under any tracks of the Lessor without the consent of the Lessor.

Liability of Lessee for Breach.

Section 11. The Lessee shall be liable for any and all injury or damage to persons or property, of whatsoever nature or kind, arising out of or contributed to by any breach in whole or in part of any covenant of this agreement.

No Other Railroad to Use Tracks.

Section 12. No railroad company other than the Lessor shall be allowed to use any track owned or built by the Lessor now or hereafter upon or extending to any part of the leased premises without the permission in writing of the Lessor.

Fire Damage Release.

Section 13. It is understood by the parties hereto that the leased premises are in dangerous proximity to the tracks of the Lessor, and that by reason thereof there will be constant danger of injury and damage by fire, and the Lessee accepts this lease subject to such danger.

It is therefore agreed, as one of the material considerations for this lease and without which the same would not be granted by the Lessor that the Lessee assumes all risk of loss or destruction of or damage to buildings or contents on the leased premises, and of or to other property brought thereon by the Lessee or by any other person with the knowledge or consent of the Lessee, and of or to property in proximity to the leased premises when connected with or incidental to the occupation thereof, and any incidental loss or injury to the business of the Lessee, where such loss, damage, destruction or injury is occasioned by fire caused by, or resulting from, the operation of the railroad of the Lessor, whether such fire be the result of defective engines, or of negligence on the part of the Lessor or of negligence or misconduct on the part of any officer, servant or employee of the Lessor, or otherwise, and the Lessee hereby agrees to indemnify and hold harmless the Lessor from and against all liability, causes of action, claims, or demands which any person may hereafter assert, have, claim or claim to have arising out of or by reason of any such loss, damage, destruction or injury, including any claim, cause of action or demand which any insurer of such buildings or other property may at any time assert, or undertake to assert, against the Lessor.

Water Damage Release.

Section 14. The Lessee hereby releases the Lessor from all liability for damage by water to the leased premises or to property thereon belonging to or in the custody or control of the Lessee, including buildings and contents, regardless of whether such damage be caused or contributed to by the position, location, construction or condition of the railroad, road-bed, tracks, bridges, dikes, ditches or other structures of the Lessor.

Termination on Default.

Section 15. It is further agreed that the breach of any covenant, stipulation or condition herein contained to be kept and performed by the Lessee, shall, at the option of the Lessor, forthwith work a termination of this lease, and all rights of the Lessee hereunder; that no notice of such termination or declaration of forfeiture shall be required, and the Lessor may at once re-enter upon the leased premises and repossess itself thereof and remove all persons therefrom or may resort to an action of forcible entry and detainer, or any other action to recover the same. A waiver by the Lessor of the breach by the Lessee of any covenant or condition of this lease shall not impair the right of the Lessor to avail itself of any subsequent breach thereof.

Termination by Notice.

Section 16. This lease may be terminated by written notice given by either the Lessor or the Lessee to the other party on any date in such notice stated, not less, however, than thirty (30) days subsequent to the date on which such notice shall be given. Said notice may be given to the Lessee by serving the Lessee personally or by posting a copy thereof on the outside of any door in any building upon the leased premises or by mailing said notice, postage prepaid, to the Lessee at the last address known to the Lessor. Said notice may be given to the Lessor by mailing the same, postage prepaid, to the office of the General Manager of the District of the Lessor in which the leased premises are located. Upon such termination and vacation of the premises by the Lessee, the Lessor shall refund to the Lessee on a prorata basis any unearned rental paid in advance.

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FEB 01 1993

Les

Lease L&T-15889

Audit No. _____

SPECIAL PROVISIONS

Section 18. The Lessor, by a separate document, has donated to the Lessee the water tank, steel tower, frame pump house and pumping equipment, together with the pipe lines shown in green on Exhibit "A", and in order to make use of said facilities and convey the water from the well leased hereunder to the distribution system of the Lessee, the Lessor hereby grants to the Lessee, during the term hereof, the rights to install, maintain and operate certain pipe line connections and meters, as shown in pink on Exhibit "A", and also the right to retain on the right of way and during the term hereof, to maintain and operate the pipe lines shown in green on Exhibit "A", the aforesaid grants being made expressly subject to the observance by the Lessee of all the conditions, covenants and agreements herein contained to be by the Lessee kept, observed and performed.

Section 18-a. The Lessee shall bear the entire cost and expense in connection with the construction, maintenance, repair and renewal of said pipe lines and appurtenances, including any and all expense which may be incurred by the Lessor in connection therewith for supervision, inspection or otherwise, and all work upon the same within the right of way of the Lessor shall be done under the direction of and according to plans and specifications approved by the Lessor.

Section 18-b. Said pipe lines and appurtenances, and all parts thereof within and outside the limits of the right of way and premises of the Lessor, shall be constructed and at all times maintained, repaired, renewed and operated by the Lessee in such a manner as to cause no interference whatsoever with the constant, continuous and uninterrupted use of the tracks, property and premises of the Lessor, both as regards operation, maintenance, repairs or renewals, or possible new construction by the Lessor.

Section 18-c. The Lessee shall indemnify and hold harmless the Lessor from and against any and all damages, claims, demands, actions, causes of action, costs and expenses of whatsoever nature which may result from the death of or injury to any person whomsoever, or from the loss of or damage to property of any kind or nature, including damage to the roadbed, tracks, equipment or other property of the Lessor, when such death, injury, loss or damage is due to the existence of said pipe lines and appurtenances, or to the construction, maintenance, operation, repair or renewal thereof, or to the contents therein or therefrom.

Section 19. Upon termination of this agreement, the Lessee shall at its own sole cost and expense cap the Lessor's well on the leased premises, and in the manner and within the time specified in Section 17 of this agreement, remove from the leased premises the pump house and water tank, and any other facilities belonging to the Lessee on the leased premises.

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FEB 01 1993

Section 20. As one of the considerations for this lease and the donation by the Lessor to the Lessee of the aforesaid water facilities, the Lessee agrees to furnish the Lessor, free of charge, such water as the Lessor may require for use at its facilities at Minidoka, Idaho.

Section 21. It is understood that the pipe lines and meters of the Lessor upon the leased premises, as shown in green and pink on Exhibit "A", shall be maintained, repaired and renewed by and at the expense of the Lessee in a manner satisfactory and acceptable to the Lessor, or, if the Lessee desires that the Lessor perform such work of maintenance it is hereby agreed that the Lessee will reimburse Lessor for the actual cost thereof.

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Section 17. The Lessee covenants and agrees to vacate and surrender the quiet and peaceable possession of the leased premises upon the termination of this lease howsoever. Within thirty days after such termination the Lessee shall (a) remove from the premises, at the expense of the Lessee, all structures and other property not belonging to the Lessor; and (b) restore the surface of the ground to as good condition as the same was in before such structures were erected, including, without limiting the generality of the foregoing, the removal of foundations of such structures, the filling of all excavations and pits and the removal of all debris and rubbish, all at the Lessee's expense, failing in which the Lessor may perform the work and the Lessee shall reimburse the Lessor for the cost thereof within thirty days after bill rendered.

In the case of the Lessee's failure to remove said structures and other property the same shall, upon the expiration of said thirty days after the termination of this lease, become and thereafter remain the property of the Lessor; and if within ninety days after the expiration of such thirty-day period the Lessor elects to and does remove, or cause to be removed, said structures and other property from the leased premises and the market value thereof on removal or of the material therefrom does not equal the cost of such removal plus the cost of restoring the surface of the ground as aforesaid, then the Lessee shall reimburse the Lessor for the deficit within thirty days after bill rendered.

**Special
Provisions.**

See attached sheets for Sections 18, 18-a, 18-b, 18-c, 19, 20 and 21
SPECIAL PROVISIONS.

**Successors
and Assigns.**

Section 18. Subject to the provisions of Section 4 hereof, this agreement shall be binding upon and inure to the benefit of the parties hereto and their heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF, the parties hereto have executed this instrument as of the day and year first herein written.

OREGON SHORT LINE RAILROAD COMPANY
UNION PACIFIC RAILROAD COMPANY

Witness:

Ed McClelland

By

D. F. Wendt
General Manager.

The foregoing agreement is accepted upon the terms stated and executed by the Chairman of the Village Board of the Village of Minidoka, Idaho, and attested by the Clerk on this 3 day of Sept, 1957, pursuant to authority vested in said Chairman by a resolution duly passed and adopted by the said Village Board of the Village of Minidoka, Idaho, on the 3 day of Sept 1957

VILLAGE OF MINIDOKA

Witness:

Paul E. Andrew

Attest:

Joel S. Wright
Clerk

By

E. S. Simmitt

Chairman of the Village Board

MICROFILMED

FEB 01 1993

89481

43306

MEMORANDUM OF GIFT

KNOW ALL MEN BY THESE PRESENTS, that OREGON SHORT LINE RAILROAD COMPANY, and its Lessee, UNION PACIFIC RAILROAD COMPANY, corporations of the State of Utah, do by these presents give, donate, convey, transfer and deliver unto the VILLAGE OF MINIDOKA, a municipal corporation of the State of Idaho, the following described personal property, situate at Minidoka, Minidoka County, Idaho:

One (1) 350,000 gallon steel water tank and 30-foot steel tower and frost box; one (1) 14.5' x 17.3' frame pump house; 340 feet of 6-inch cast iron fill line; 60 feet of 6-inch cast iron pipe overflow line located in water tank and frost box; 330 feet of 10-inch cast iron pipe; 40 feet of 13 1/2" casing; one (1) 150 GPM Byron-Jackson deep well turbine pump No. 130119, including 222 feet of 5-inch wrought iron pipe drop line and 222 feet of 13/16 x 2" pump rods; one (1) 20 HP GE motor No. 4828168; three (3) Westinghouse transformers; one (1) 15 HP fire pump; and two (2) 4,000 watt electric heaters.

TO HAVE AND TO HOLD THE SAME UNTO SAID VILLAGE OF MINIDOKA, its successors and assigns, forever.

IN WITNESS WHEREOF, said Oregon Short Line Railroad Company and Union Pacific Railroad Company have executed this instrument this 9th day of July, 1957.

Witness:

M. E. ThomasOREGON SHORT LINE RAILROAD COMPANY,
UNION PACIFIC RAILROAD COMPANY;By E. Hicks
Executive Vice President

POOR ORIGINAL

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FEB 01 1993

Form 2214
RENEWAL RIDER

to be attached to agreement Audit No. A-80215

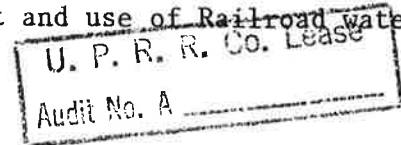
Dept. No. L&T No. 15889
Folder No. 879-49

Between OREGON SHORT LINE RAILROAD COMPANY and UNION PACIFIC RAILROAD COMPANY (Lessor)
and CITY OF MINIDOKA (Lessee).

Present Assignee (if any)

Covering water tank, pump house, water pipeline encroachment and use of Railroad water.

Location Minidoka, Minidoka County, Idaho



Dated: September 13, 1957 Effec. Date: July 1, 1957 Orig. Exp.: June 30, 1962

Expiration (by latest extension) June 30, 1982

IT IS HEREBY MUTUALLY AGREED by and between the present parties to the above-named agreement that said agreement, which by this reference is made a part hereof, is hereby adopted by said parties as their agreement for a term beginning July 1, 1982 and extending to and including June 30, 1987; and that all the terms and conditions of said agreement, as heretofore or herein supplemented and/or amended, shall have the same force and effect and be as binding upon the parties hereto during said term as if the same were repeated herein; said agreement with the supplements and/or amendments (if any) to be subject to termination prior to the expiration of the term herein named in the same manner as is provided therein for termination prior to the expiration of the term thereof.

SPECIAL PROVISIONS: Sections 22 through 25 is contained on the sheet attached and is hereto and hereby made a part hereof. The Lessee agrees to pay in advance to the Lessor a rental of FIVE DOLLARS (\$5.00) for the extended term hereof.

Dated June 20, 1985. Made in duplicate.

Witness:

Jerry C. Finner

Witness:

X *Deon Fassett, City Clerk*

OREGON SHORT LINE RAILROAD COMPANY
UNION PACIFIC RAILROAD COMPANY

By

C. O. Durr
Director-Real Estate

CITY OF MINIDOKA

X

Maxine Homer
MAYOR

\$5.00 per term.

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FEB 07 1993

Section 22. COMPLIANCE WITH LEGAL REQUIREMENTS; INDEMNITY. The lessee shall observe and comply with all applicable federal, state and municipal and other laws, ordinances, rules and regulations, and shall apply for and obtain any and all public authority, permission and licenses necessary thereto. The lessee shall obtain any and all necessary water rights in the joint name of the lessee and the lessor. The lessee shall indemnify and hold the lessor harmless from and against any loss, cost, damage, expense, liabilities, penalties, claims and forfeitures resulting from or in any manner connected with any failure of the lessee to comply with the provisions of this section, with the requirements of any public authority, license or permission obtained as aforesaid, or with any water quality regulations issued by federal, state or local governmental jurisdictions.

Section 23. LESSOR NOT A WATER SUPPLY SYSTEM; NO WARRANTIES AS TO WATER QUALITY; INDEMNITY. It is expressly understood and agreed that the lessor is not a public, municipal or community water supply system, and has not made and does not make any representations, promises or warranties with respect to the quality or fitness for any particular purposes of the water in the leased well, and the lessee assumes the risk of any and all impurities and harmful substances which may be contained in said well, and the lessee agrees to indemnify and save the lessors officers, agents and employees, harmless from and against any and all loss, cost, damage, fees, claims, demands or causes of action by persons whomsoever arising or resulting from the consumption or use of water from said well. The lessee, at the lessee's sole expense, shall take any and all action necessary to maintain all water taken from said well in a safe and potable condition as required by all applicable federal, state and local laws and regulations.

Section 24. NEEDS OF LESSOR. The lessee shall supply from the well, at no cost to lessor, the reasonable water needs of the lessor.

Section 25. MAINTENANCE. The lessee, at the lessee's own cost and expense, will operate, maintain, repair, modify and/or reconstruct the well and all appurtenances thereto.

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FEB 01 1993

File : 879-49

DUPLICATE ORIGINAL - RAILROAD COPY

FORM 2213
EXTENSION RIDER
U. P. R. Co.
No: A-80215
Audit No. 15889

To be attached to Agreement Audit No. A-80215 Dept. No. L&T 15889
Folder No. 879-49

Between OREGON SHORT LINE RAILROAD COMPANY and UNION PACIFIC RAILROAD COMPANY (Lessor) and CITY OF MINIDOKA, IDAHO (Lessee)

Covering a water tank, pump house, water pipeline encroachment and use of Railroad water

Location Minidoka, Minidoka County, Idaho

U. P. R. Co. Lease
Audit No. A 80215

Dated: September 13, 1957 Original Effective Date: July 1, 1957

Original Expiration Date: June 30, 1962

Expiration (by latest extension) June 30, 1987

IT IS HEREBY MUTUALLY AGREED by and between the present parties to the above-named Agreement that the term thereof shall be and hereby is extended to and including June 30, 1992, and that all the terms and conditions thereof, as heretofore or herein supplemented and/or amended, shall remain in full force and effect during the extended term, said Agreement with the supplements and/or amendments (if any) to be subject to termination prior to the expiration of the extended term in the same manner as is provided therein for termination prior to the expiration of the term hereby extended.

SPECIAL PROVISIONS: Special Provision entitled "Protection of Fiber Optic Cable Systems" is attached hereto and hereby made a part hereof.

Licensee agrees to pay in advance to the Licensor a rental of five dollars (\$5.00) for the extended term hereof.

Dated March 5, 1987. Made in duplicate.

Witness:

[Signature]

Witness:

x Deon Fasset

\$5.00 per term.

Extension Rider
Form Approved 8/86
AVP-Law

OREGON SHORT LINE RAILROAD COMPANY
UNION PACIFIC RAILROAD COMPANY

By [Signature]
General Director-Real Estate

CITY OF MINIDOKA

x Marine Lomer
Mayor

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FEB 01 1993

PROTECTION OF FIBER OPTIC CABLE SYSTEMS

(a) Fiber optic cable systems may be buried on the Lessor's property. Lessee shall telephone the Lessor at 1-800-336-9193 (a 24-hour number) to determine if fiber optic cable is buried anywhere on the Lessor's premises to be used by the Lessee. If it is, Lessee will telephone the telecommunications company(ies) involved, arrange for a cable locator, and make arrangements for relocation or other protection of the fiber optic cable prior to beginning any work on the Lessor's premises.

(b) In addition to the liability terms elsewhere in this Agreement, the Lessee shall indemnify and hold the Lessor harmless against and from all cost, liability, and expense whatsoever (including, without limitation, attorney's fees and court costs and expenses) arising out of or in any way contributed to by any act or omission of the Lessee, its contractor, agents and/or employees, that causes or in any way or degree contributes to (1) any damage to or destruction of any telecommunications system by the Lessee, and/or its contractor, agents and/or employees, on Lessor's property, (2) any injury to or death of any person employed by or on behalf of any telecommunications company, and/or its contractor, agents and/or employees, on Lessor's property, and/or (3) any claim or cause of action for alleged loss of profits or revenue by, or loss of service by a customer or user of, such telecommunication company(ies).

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FEB 01 1993

Salt Lake City - March 26, 1982

L&T 15889

Mr. C. O. Durham - Omaha

Attached please find six Exhibit "A" prints numbered A-4255-K showing Agreement L&T 15889, Audit No. A-80215, in favor of the City of Minidoka for a water tank site, pumphouse site and site for water lines at Minidoka, Idaho.

The Memorandum of Gift executed July 9, 1957, Dept. No. CD 43306 to the Village of Minidoka, Idaho, providing for donation to it of 350,000 gallon steel water tank, pump house, pump facilities and pipe lines at Minidoka was assigned UPRRCo. Agreement Audit No. 89481.

Inasmuch as the lease agreement will expire on June 30, 1982, would you please handle with the VPO for his approval for the extension of the agreement for a further term.

If there are no objections, would you please furnish rental to be charged for the use of the water. With respect to the land rental, due to the size of the parcel under lease, I would recommend a minimum rental of \$50.00 per annum.

D. J. Austin

Att:
RSW/j



UPRRCo.	
REAL ESTATE - SLC	
DR3	
FEB 10 1983	
157	WHC JSG BNU SLC

RSW
FEB 10 1983

Omaha - February 8, 1983

3-16-3R (116)

Mr. D. J. Austin - Salt Lake City:

Reference is made to previous correspondence on your file L&T 15889, regarding request by the City of Minidoka for renewal of Agreement Audit No. A-80215 granting the City lease of Railroad right of way for a water facility site and water line at Minidoka, Idaho.

Mr. Davis has no objections to renewing this lease, providing the Railroad's needs are met first.

Mr. Conley advises that the City utilizes another well at this location as a back-up system which is not covered by any agreement and is shown in blue on the attached copy of OSLRRCo. print dated September 14, 1982. Mr. Conley has no objections to renewing this agreement providing that the renewal rider include an amendment to cover the back-up well at no additional charge to the City.

The Law Department has furnished some additional provisions for inclusion in the renewal rider, copy attached, which clarifies the Railroad's right to use the water at no cost and obligates the City of Minidoka to maintain the well. Additionally, you will note that Section 2 clarifies the Railroad's position with respect to the quality and fitness of the water and also indemnifies the Railroad from claims resulting from use of such water.

Extension of the lease for a five-year term should be made effective July 1, 1982, at the minimum rental rate for the water interest in addition to the land lease rental. //

C. O. DURHAM

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FEB 01 1993

SITE INSPECTION FORM

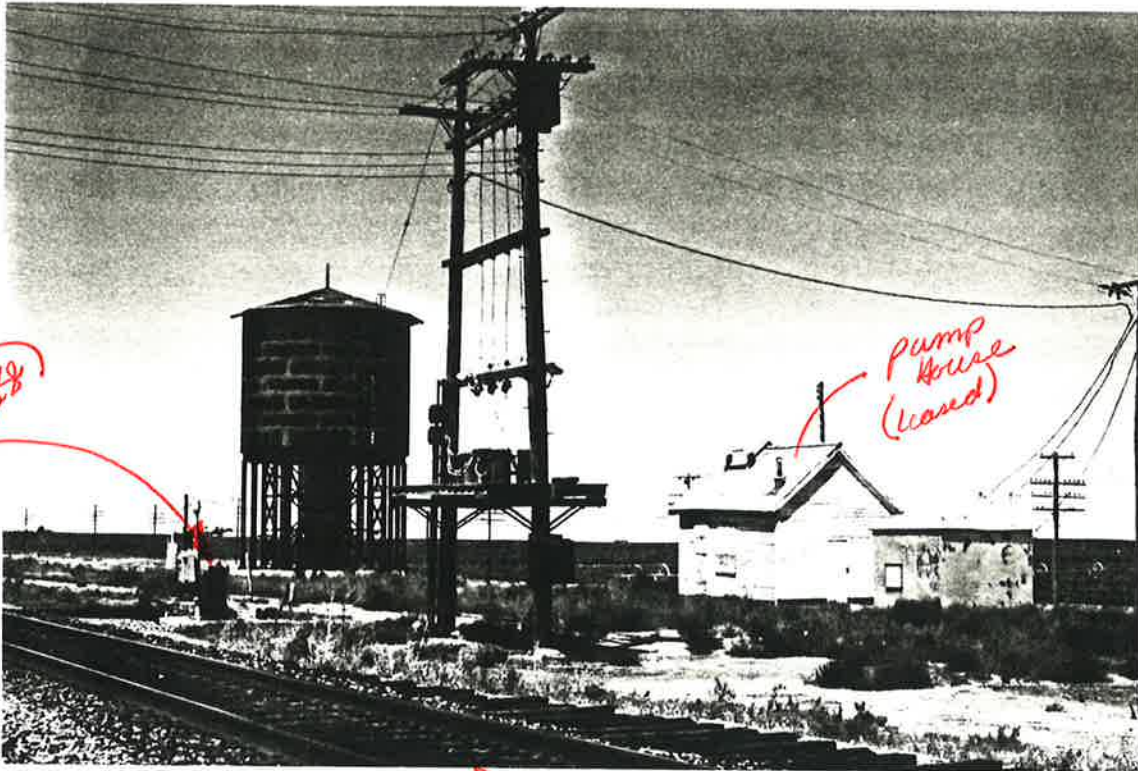
FILE: 879-49

LESSEE/LICENSEE: Village of Minadoka

PRESENT USE: Water

LOCATION: Minadoka ID.

INSPECTION DATE: 8/19/91



ADDITIONAL REMARKS: _____

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FEB 01 1993

SITE INSPECTION FORM

FILE: 879-49

LESSEE/LICENSEE: CITY OF MINIDOKA

PRESENT USE: Water Tank, Pump House

LOCATION: Minidoka, Idaho

INSPECTION DATE: 10-12-87



Two
photos
(see page 2)

ADDITIONAL REMARKS: ok

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FEB 01 1993

SITE INSPECTION FORM

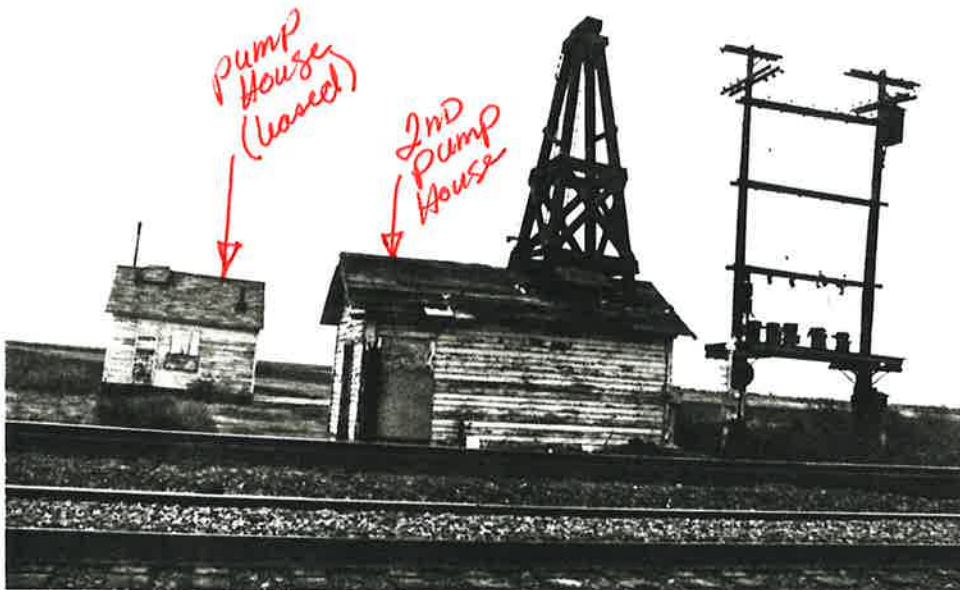
FILE: 879-49

LESSEE/LI _____

PRESENT L _____

LOCATION: _____

INSPECTIO



ADDITIONAL REMARKS: ok

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FEB 01 1993



State of Idaho

DEPARTMENT OF WATER RESOURCES

1301 North Orchard Street, Statehouse Mail, Boise, Idaho 83720-9000

Phone: (208) 327-7900 FAX: (208) 327-7866

CECIL D. ANDRUS
GOVERNOR

R. KEITH HIGGINSON
DIRECTOR

March 24, 1992

Jack Nelson
Union Pacific Railroad Company
1416 Dodge Street
Omaha, NE 68179

RE: Snake River Basin Adjudication (SRBA)
Minidoka County - Claim A36-04203

Dear Mr. Nelson:

This letter is a follow-up to our telephone conversation on March 16, 1992, regarding the lease between Union Pacific Railroad Company and the City of Minidoka.

As we discussed, I need to obtain a copy of that lease in order to determine ownership of the water right. I am unable to continue with the review of the above referenced claim as well as the City of Minidoka claims until I receive additional information. If there is other documentation you would like to supply as well, please do not hesitate to forward it.

If you have any questions or would like to discuss this subject, please call me at (208) 327-7935. I would appreciate it if the documents are forwarded by April 3, 1992, at the latest.

Sincerely,

Helen Thornton
Sr. Water Resource Agent
Adjudication Bureau

HT:sf:ht:state:tf

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FEB 01 1993

TELEPHONE & VISITOR LOG

Date: 2/28/92

Time: 3:30pm

Call X Visit

Name: Leroy Liston

Former UP Water Service Supervisor

Address: Currently w/ UP in different job assignment
Pocatello

Phone No.: 236-5416

Claim No(s): A36-04204 / A36-04203

=====

RE: Water Uses of UP well at Minidoka outside city limits

Conversation: According to Mr. Liston, the RR did put in
a 4" line to the beet dump as well as lines to
a "motel for migrants" just across the tracks from the
well and to 4 trailer houses.

=====

Action Required:

Correctly describe water use for areas outside city
limits. Change in the municipal was interpreted seems
to explain why UP did not accurately describe the
uses.

Domestic - 5 houses

Commercial - 2 bathrooms, 1 drinking spigot

POU: Domestic

MICROFILMED
FEB 01 1993

Haley

2/18 David Haley 436-4717

attorney for City of Minidoka

city claimed portion of UP claims - different wells - why

3/2/1992.

Spoke w/ Mr. Haley -

I explained the contradiction between the basis of claims the city used and the Union Pacific claims. I told him I need evidence of priority for the city wells. I noted the 1943 water tower date but stated there was no other info that I had available

He said he would try to get something by the end of this week —

6/2/92

I never received a response. HHT

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FEB 01 1993



State of Idaho

DEPARTMENT OF WATER RESOURCES

1301 North Orchard Street, Statehouse Mail, Boise, Idaho 83720-9000

Phone: (208) 327-7900 FAX: (208) 327-7866

4/10/92 No response HAT

T 4-8

CECIL D. ANDRUS
GOVERNOR

March 24, 1992

R. KEITH HIGGINSON
DIRECTOR

David W. Haley
P. O. Box 396
Rupert, ID 83350

RE: Snake River Basin Adjudication Claims for the City of
Minidoka, Minidoka County

Dear Mr. Haley:

This letter is a follow-up to a telephone conversation we had on March 2, 1992. At that time, I discussed the with you a potential conflict in the ownership of the water rights. The two claims filed by the City of Minidoka are based on prior claims made by Union Pacific Railroad Company.

If these are claims are correct, I need some additional information from you regarding the date of priority when the water use began. Enclosed please find a brochure describing the types and examples of evidence which can be supplied to IDWR.

Please forward the evidence of priority to my attention by April 3, 1992. Additionally, if you have any additional information supporting the ownership question, such as leases or other documents, please also forward that.

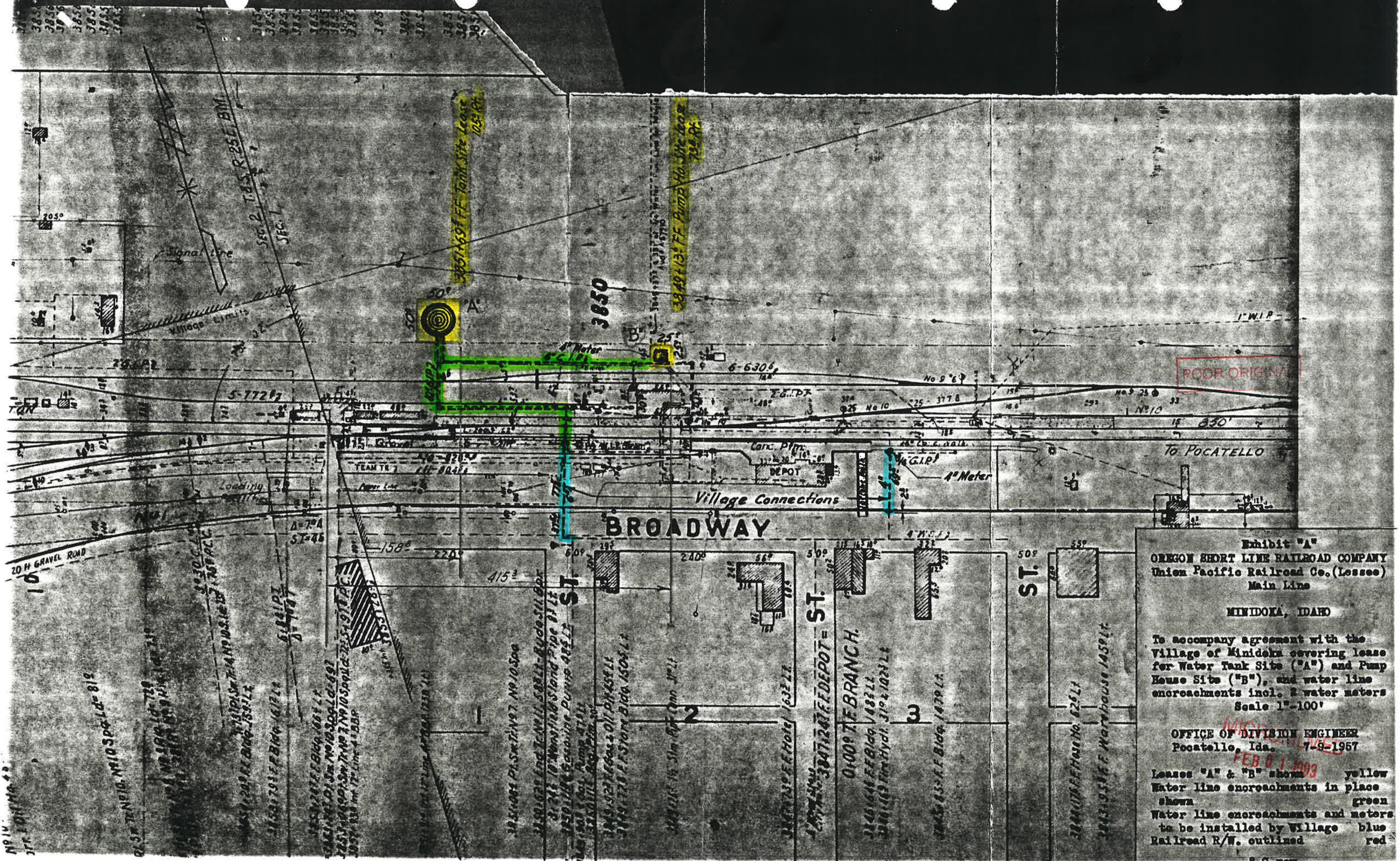
I would be happy to discuss any of these subjects with you if you have any questions or I can be of any assistance. Thank you for your time.

Sincerely,

Helen Thornton
Sr. Water Resource Agent
Adjudication Bureau

HT:sf:ht:state:tf

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FEB 01 1993



WELL LOG AND REPORT TO THE STATE RECLAMATION ENGINEER OF IDAHO

Log No.

Rec.

Well No.

Permit No.

RECEIVED
MAY 27 1953

Department of Reclamation

(DO NOT FILL IN)

Owner Village of Minidoka Driller C. E. Hillier
Address Minidoka, Idaho Address Minidoka, Idaho Lic. No. 35
Location of Well: $\frac{1}{4}$ $\frac{1}{4}$ Sec. 1, T. 8 N/S, R. 25 E/W City Minidoka County.
and feet N/S, and feet E/W from corner of $\frac{1}{4}$ $\frac{1}{4}$ Sec.
Water will be used for City Use Total depth of well 211 ft.
Size of drilled hole 12" Weight of casing per linear foot 12 lb.
Thickness of casing 2" Casing material steel
Diameter, length and location of casing 17 ft. of 12" R. P. pipe, from 0-- 173 ft.
(Casing 12" in diameter and under give inside diameter; casing over 12" in diameter give outside diameter.)
Number and size of perforations located feet to feet
from surface of ground.
Other perforations:
If flowing well, give flow in c.f.s. or g.p.m. and shut in pressure
If non-flowing well, give depth of standing water from surface
If flowing well, describe control works
(Type and size of valve, etc.)
On pumping test delivery was g.p.m. or c.f.s. Drawdown was feet
Length of time pumped during check was hr. min. Water temp. ° Fahrenheit.
Date of commencement of well 3/10/53 Date of completion of well 4/10/53
Type of well rig 50 A Loggins

CASING RECORD

Diam. Casing	From Feet	To Feet	Length	Remarks — Seals, Grouting, Etc.
12"	0	173	173 ft.	

GENERAL INFORMATION — Pumping Test, Quality of Water, Etc.

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S. 1 85 25E

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WELL LOG

From Foot	To Foot	Type of Material	Drilling Time		Water-bearing Formation Ant. Yes or No	Casing Perforated Ant. Yes or No
			Hrs.	Min.		
					no	
0	10	Soft and hardpan.				
10	20	Black lava, boulders.				
20	30	Gray lava, hard.				
30	40	Red lava, boulders.				
40	50	Gray lava, hard.				
50	60	Red lava, hard.				
60	70	Gray lava, hard.				
70	80	Red lava, hard.				
80	90	Gray lava, hard.				
90	100	Red lava and clinders.				
100	110	Gray lava.				
110	120	Red lava and clinders.				
120	130	Gray lava.				
130	140	Red lava and clinders.				
140	150	Gray lava.				
150	160	Red lava.				
160	170	Gray lava, hard.				
170	180	Red lava, hard.				
180	190	Gray lava, hard.				
190	200	Red lava, hard.				
200	210	Gray lava, hard.				
210	220	Red lava, hard.				
220	230	Gray lava, hard.				
230	240	Red lava, hard.				
240	250	Gray lava, hard.				
250	260	Red lava, hard.				
260	270	Gray lava, hard.				
270	280	Red lava, hard.				
280	290	Gray lava, hard.				
290	300	Red lava, hard.				
300	310	Gray lava, hard.				
310	320	Red lava, hard.				
320	330	Gray lava, hard.				
330	340	Red lava, hard.				
340	350	Gray lava, hard.				
350	360	Red lava, hard.				
360	370	Gray lava, hard.				
370	380	Red lava, hard.				
380	390	Gray lava, hard.				
390	400	Red lava, hard.				
400	410	Gray lava, hard.				
410	420	Red lava, hard.				
420	430	Gray lava, hard.				
430	440	Red lava, hard.				
440	450	Gray lava, hard.				
450	460	Red lava, hard.				
460	470	Gray lava, hard.				
470	480	Red lava, hard.				
480	490	Gray lava, hard.				
490	500	Red lava, hard.				
500	510	Gray lava, hard.				
510	520	Red lava, hard.				
520	530	Gray lava, hard.				
530	540	Red lava, hard.				
540	550	Gray lava, hard.				
550	560	Red lava, hard.				
560	570	Gray lava, hard.				
570	580	Red lava, hard.				
580	590	Gray lava, hard.				
590	600	Red lava, hard.				
600	610	Gray lava, hard.				
610	620	Red lava, hard.				
620	630	Gray lava, hard.				
630	640	Red lava, hard.				
640	650	Gray lava, hard.				
650	660	Red lava, hard.				
660	670	Gray lava, hard.				
670	680	Red lava, hard.				
680	690	Gray lava, hard.				
690	700	Red lava, hard.				
700	710	Gray lava, hard.				
710	720	Red lava, hard.				
720	730	Gray lava, hard.				
730	740	Red lava, hard.				
740	750	Gray lava, hard.				
750	760	Red lava, hard.				
760	770	Gray lava, hard.				
770	780	Red lava, hard.				
780	790	Gray lava, hard.				
790	800	Red lava, hard.				
800	810	Gray lava, hard.				
810	820	Red lava, hard.				
820	830	Gray lava, hard.				
830	840	Red lava, hard.				
840	850	Gray lava, hard.				
850	860	Red lava, hard.				
860	870	Gray lava, hard.				
870	880	Red lava, hard.				
880	890	Gray lava, hard.				
890	900	Red lava, hard.				
900	910	Gray lava, hard.				
910	920	Red lava, hard.				
920	930	Gray lava, hard.				
930	940	Red lava, hard.				
940	950	Gray lava, hard.				
950	960	Red lava, hard.				
960	970	Gray lava, hard.				
970	980	Red lava, hard.				
980	990	Gray lava, hard.				
990	1000	Red lava, hard.				

If more space is required use Sheet No. 2

WELL DRILLERS STATEMENT

This well was drilled under my jurisdiction and the above information is true and correct to the best of my knowledge and belief.

Signed C. L. Heddleston

By _____

License No. 35

Dated May 21, 1959.

Subscribed and sworn before me this _____ day of _____

MICROFILMED
FEB 01 1993
Notary Public

My commission expires _____

POOR ORIGINAL

NOTARIZATION NOT NECESSARY
UNDER NEW LAW.