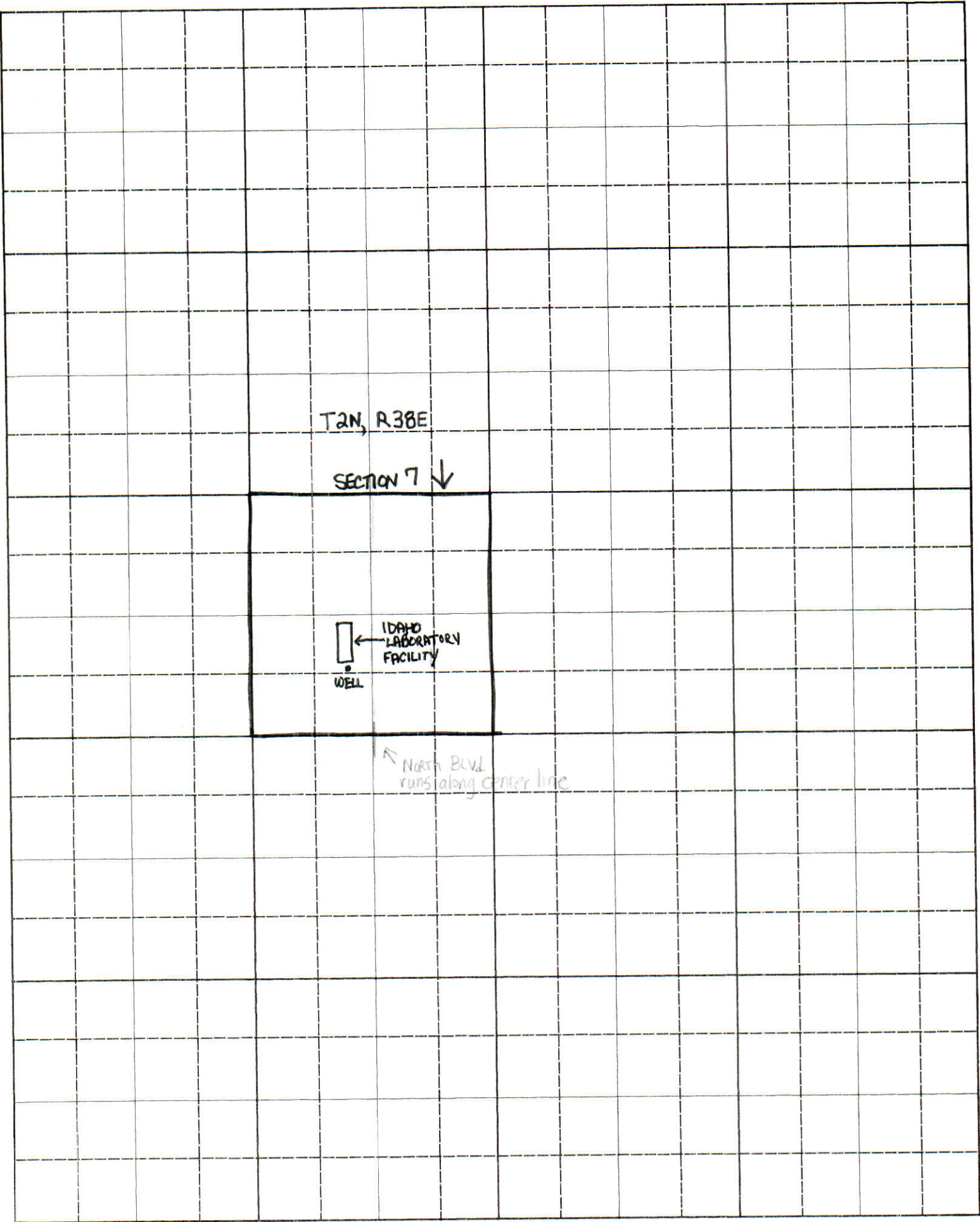


11. Map of proposed project: show clearly the proposed point of diversion, place of use, section number, township and range number.



Scale: 2 inches equal 1 mile.

BE IT KNOWN that the undersigned hereby makes application for permit to appropriate the public waters of the State of Idaho as herein set forth.

RECEIVED
DEPARTMENT OF
LAND
BOISE, IDAHO
JAN 10 2013

Mark C. Arguena
Deputy Manager (Applicant)

Proof of Publication

The Post-Register

State of Idaho, }
County of Bonneville } ss.

I, J. Robb Brady, first being duly sworn, depose and say: That I am the Principal Clerk of The Post Company, a corporation of Idaho Falls, Bonneville County, Idaho, publishers of The Post-Register, a newspaper of general circulation, published daily, except Saturday, at Idaho Falls, Idaho; said Post-Register being a consolidation of the Idaho Falls Times, established in the year 1890, The Idaho Register, established in the year 1880 and the Idaho Falls Post, established in 1903, such consolidation being made on the 1st day of November, 1931, and each of said newspapers having been published continuously and uninterruptedly, prior to consolidation, for more than seventy-eighty (78) weeks and said Post-Register having been published continuously and uninterruptedly from the date of such consolidation, up to and including the last publication of notice hereinafter referred to.

That the notice, of which a copy is hereto attached and made a part of this affidavit, was published in said Post-Register for two consecutive weeks, first publication having been made on the 5th day of November, 1981, last publication having been made on the 12th day of November, 1981, and that the said notice was published in the regular and entire issue of said paper on the respective dates of publication, and that such notice was published in the newspaper and not in a supplement.

Subscribed and sworn to before me, this 18th day of November, 1981

Deon R. Napier
Notary Public

My commission expires September 30,, 1984

B10, 1M,

**NOTICE OF APPLICATION
FOR WATER RIGHT**

Notice is hereby given that the following application(s) have been submitted for permit to appropriate the public waters of the State of Idaho:

25-7263

U.S. DEPT. OF ENERGY
550 SECOND STREET, IDAHO FALLS,
ID 83401
Source: GROUNDWATER
Date Filed: 10/26/1981
Amount: 0.67 CFS
Diversion Point: NESW Sec 07 T 02N R
38E, BONNEVILLE Co.
Use: COOLING (0.67 CFS) from 01/01
to 12/31
Place of Use: NESW Sec 07 T 02N R
38E
Diversion Means: WELL AND PUMP

35-8001
CAMPBELL, DERLIN L. &/or DEON
L.
RT. No.9, BOX 308, IDAHO FALLS, ID

83402
Source: GROUNDWATER
Date Filed: 10/26/1981
Amount: 1.45 CFS
Diversion Point: NENW Sec 13 T 02N R
36E, BONNEVILLE Co.
Use: IRRIGATION (1.45 CFS) from
04/01 to 11/01
Place of Use: NENW NWNW SWNW
Sec 13 T 02N R 36E FOR 80 ACRES
Diversion Means: WELL AND PUMP

If issued, the permit(s) will be subject to all prior water rights. Protests against the granting of any permit must be filed with the Director of the Idaho Department of Water Resources, 150 Shoup Ave., Idaho Falls, Idaho 83402 on or before NOVEMBER 23, 1981

A. KENNETH DUNN
Director

Published: November 5, 12, 1981

RECEIVED
NOV 23 1981
Department of Water Resources
Eastern District Office

MICROFILMED

10. Other water rights on these lands _____
11. Other water right diverted from same p.d. NONE
12. **Diversion and Delivery System Diagram:** Indicate all major components and distances between components. Indicate ditch size/pipe i.d. as applicable. Indicate on systems with measurement port the distance between the port and the nearest component/pipe bend/restriction both upstream and downstream, and the inside pipe diameter at the measurement port. On multiple diversion systems indicate how diversion systems are connected.

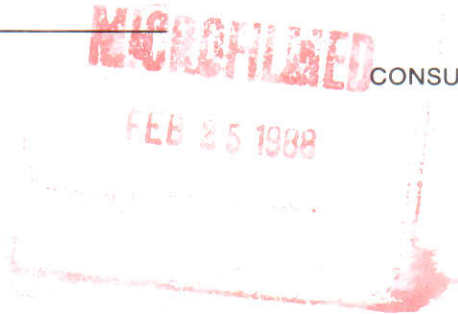


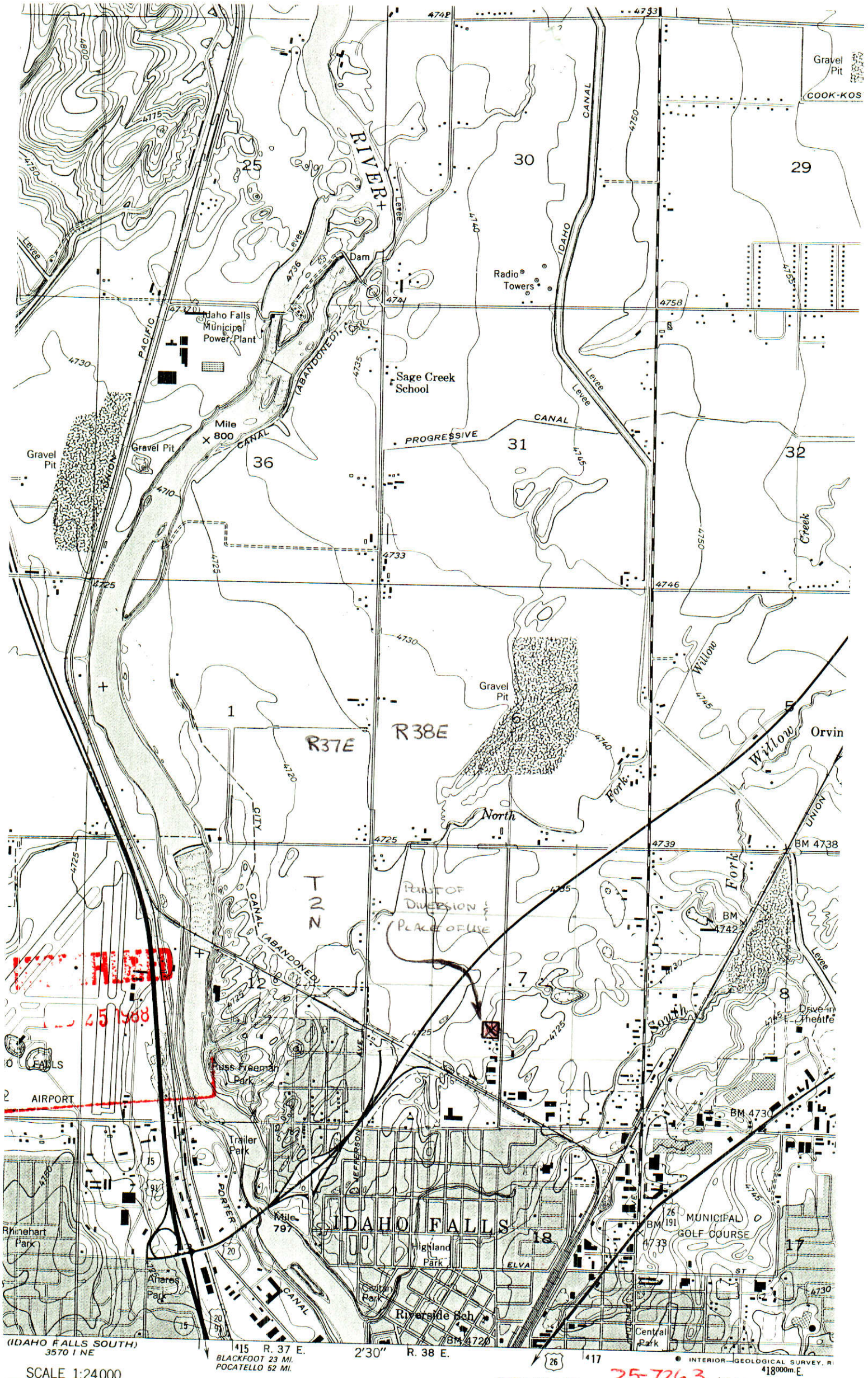
13. ☒ **Photo of Diversion & System Attached** ☐ **Aerial Photo of Place of Use Attached or Map of Irrigated Acreage Attached**

14. Remarks _____

15. Recommended Amendments
- | | | |
|---|--|--|
| ☐ Change P.D. as reflected above | ☐ Add P.D. as reflected above | ☒ None |
| ☐ Change P.U. as reflected above | ☐ Add P.U. as reflected above | ☐ Other |
16. Examiner's/Consultant's Signature Keith C Wilson Date 15 June 1984
- Consultant's License Number _____
- IDWR Director's Authorization to Conduct
- Beneficial Use Examination _____

Date _____ CONSULTANT SEAL

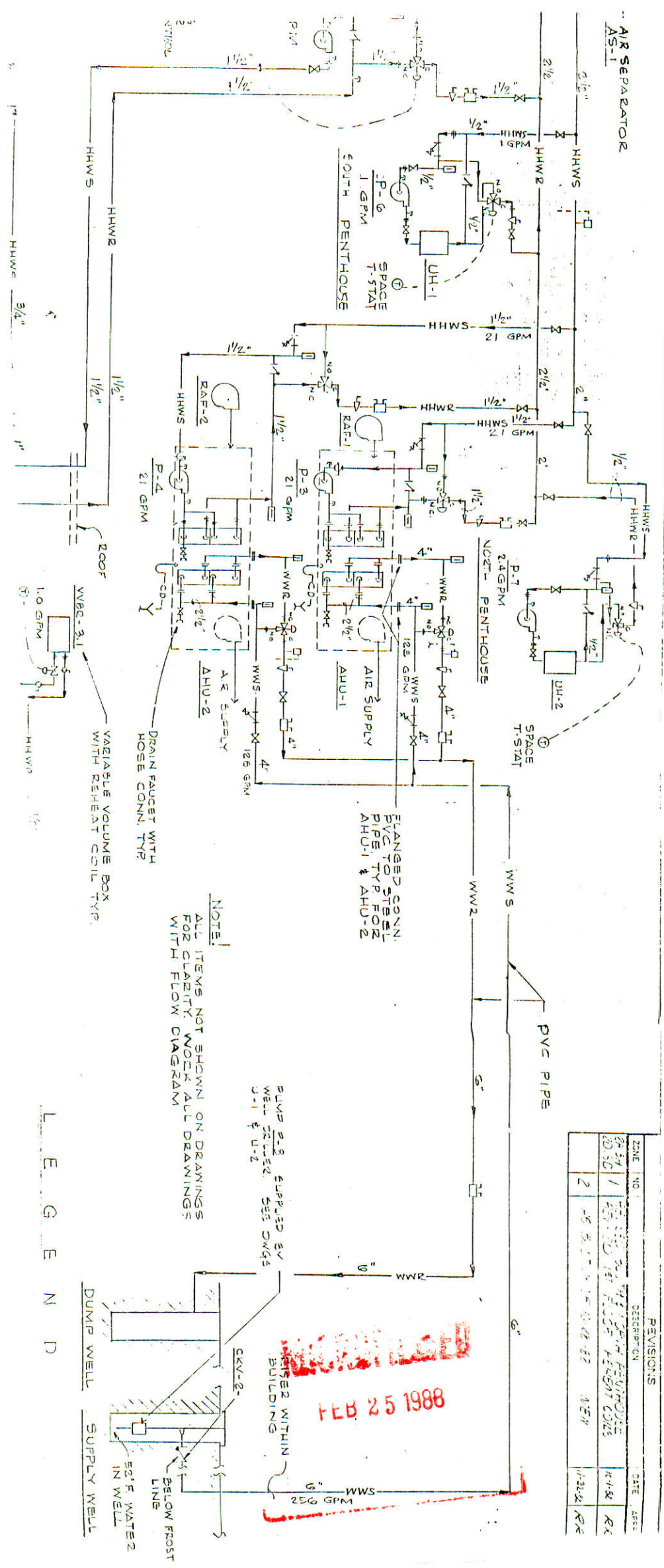




(IDAHO FALLS SOUTH) 3570 I NE
SCALE 1:24000
15 R. 37 E. BLACKFOOT 23 MI. POCAHELLO 52 MI.
2'30" R. 38 E.
SHELLY 9.4 MI. POCAHELLO 52 MI.
INTERIOR GEOLOGICAL SURVEY, RI 418000m. E.
25-7263

25-7263

Kaw



REVISIONS		DATE	
ZONE	NO.	DESCRIPTION	DATE
25-7263	1	REVISIONS	10-1-88
25-7263	2	REVISIONS	1-25-88

State of Idaho
Department of Water Resources

WATER RIGHT LICENSE

WATER RIGHT NO. 25-7263

Priority: October 26, 1981 Amount: .67 CFS 152.5 AFA

This is to certify, that U.S. DEPT. OF ENERGY
550 2ND ST.

IDAHO FALLS, ID 83401 has complied with the terms and conditions
of the permit issued pursuant to Application for Permit dated October 26, 1981, and
has submitted proof to the Department of Water Resources on November 5, 1982, that
water has been applied to a beneficial use; an examination by the Department indicates
that the works have a diversion capacity of .68 cfs of water from a **GROUNDWATER**
source and that a water right has been established as follows:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>RATE OF DIVERSION</u>	<u>VOLUME</u>
Cooling	05/01 to 10/01	.67 cfs	152.5 afa

LOCATION OF POINT OF DIVERSION(S): NESW , Sec. 7, Township 2N, Range 38E
Bonneville County

PLACE OF USE: Cooling

TWN RGE SEC

2N 38E 7 NESW

CONDITIONS/REMARKS:

1. The right to the use of the water hereby confirmed is limited to the amount which can actually be beneficially used and is restricted and appurtenant to the lands or place of use and to the purpose herein described, as provided by the laws of Idaho.
2. This right is subject to all prior water rights and may be forfeited by five years of non-use.
3. Modifications to or variance from this license must be made within the limits of Section 42-222, Idaho Code, or the applicable Idaho law.
4. Return flow if discharged to a subsurface system must be authorized by a separate injection well permit.
5. Water used to cool the DOE lab facility shall be non-consumptive & returned to the aquifer.

This license is issued pursuant to the provisions of Section 42-219, Idaho Code.
Witness the seal and signature of the Director, affixed at Boise, this 24th day
of February, 1988.

MICROFILMED

Director

FEB 25 1988

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR PERMIT **APPROVED**

To appropriate the public waters of the State of Idaho

1. Name of applicant U.S. Department of Energy Phone 536-0275

Post office address 550 Second Street Idaho Falls, ID 83401

2. Source of water supply ground water which is a tributary of _____

3. Location of point of diversion is NE $\frac{1}{4}$ of SW $\frac{1}{4}$ of Section 7 Township 2N

Range 38E B.M. Bonneville County, additional points of diversion if any: _____

4. Water will be used for the following purposes:

Amount .67cfs for cooling water purposes from 1/01 to 12/31 (both dates inclusive)
(cfs or acre-feet per annum) -10-1981 to -1-2022

Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)

Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)

Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)

5. Total quantity to be appropriated:

a. .67 cubic feet per second and/or b. _____ acre-feet per annum.

6. Proposed diverting works:

a. Description of ditches, flumes, pumps, headgates, etc. Production well with 25 hp motor driven pump; 6" piping will connect well with utilization facility (ILF)

b. Height of storage dam _____ feet, active reservoir capacity _____ acre-feet; total reservoir capacity _____ acre-feet, materials used in storage dam: _____

Period of year when water will be diverted to storage _____ to _____ inclusive.
(Month/Day) (Month/Day)

c. Proposed well diameter is 10 inches; proposed depth of well is 300 feet.

7. Time required for the completion of the works and application of the water to the proposed beneficial use is 1 years (minimum 1 year — maximum 5 years).

8. Description of proposed uses:

a. If water is **not** for irrigation:

(1) Give the place of use of water: NE $\frac{1}{4}$ of SW $\frac{1}{4}$ of Section 7 Township 2N
Range 38E B.M.

(2) Amount of power to be generated: _____ horsepower under _____ feet of head.

(3) List number of each kind of livestock to be watered _____

(4) Name of municipality to be served _____, or number of families to be supplied with domestic water _____

(5) If water is to be used for other purposes describe: Water will be used for cooling purposes at DOE's Idaho Laboratory Facility (ILF) and then returned to the aquifer.

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b. If water is for irrigation, indicate acreage in each subdivision in the tabulation below:

TWP	RANGE	SEC.	NE¼				NW¼				SW¼				SE¼				TOTALS
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	

Total number of acres to be irrigated _____

c. Describe any other water rights used for the same purposes as described above. _____

9. a. Who owns the property at the point of diversion U.S. Department of Energy

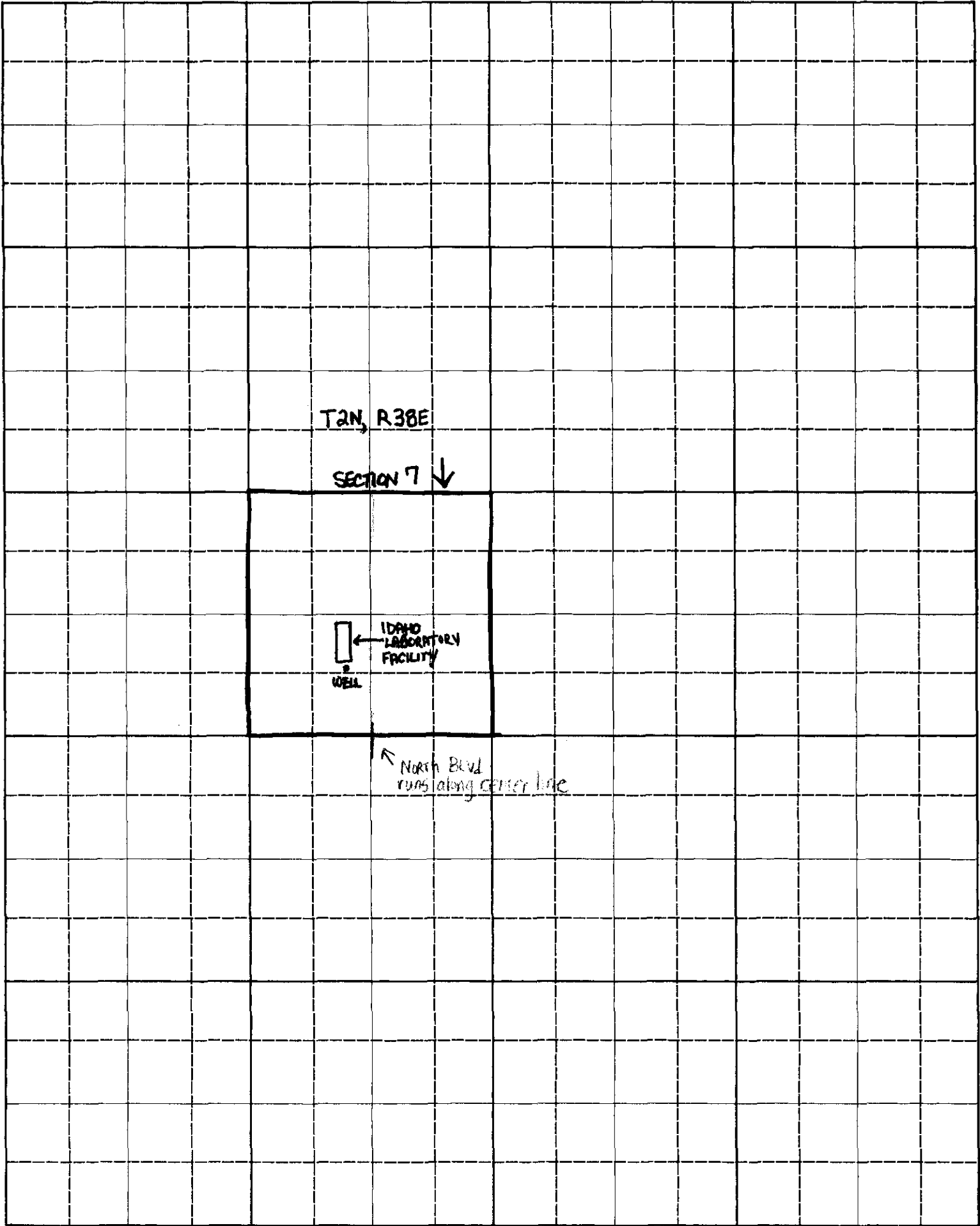
b. Who owns the land to be irrigated or place of use U.S. Department of Energy

c. If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing _____

10. Remarks This application is for notification purposes only as a matter of
comity, and is not meant to be nor should be construed as a waiver or
surrender in any manner of any and all rights the U.S. may have to the
subject waters. The payment enclosed with this "Application for Permit"
is tendered under protest and should not be considered nor is it an
admission of liability by the U.S. for any payment pursuant to this submittal.

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



Scale: 2 inches equal 1 mile.

BE IT KNOWN that the undersigned hereby makes application for permit to appropriate the public waters of the State of Idaho as herein set forth.

Nick C. Arguena
Deputy Manager (Applicant)

MICROFILMED

Proposed Priority 10/26/1981

Received by EMC Date 10-26-81 Time 10:35 A

Preliminary check by HWS Fee \$ \$45

Received by CW Date 10-26-81 # 19134

Publication prepared by Susan Date 10-28-81

Published in Post-Register

Publication dates 11-5-81 11-12-81

Publication approved CW Date 12-03-81

Protests filed by: None

Copies of protests forwarded by _____

Hearing held by _____ Date _____

Recommended for approval denial by EMC RC

ACTION OF THE DIRECTOR, DEPARTMENT OF WATER RESOURCES

This is to certify that I have examined Application for Permit to appropriate the public waters of the State of Idaho No. 25-7263, and said application is hereby APPROVED.

1. Approval of said application is subject to the following limitations and conditions:

- a. SUBJECT TO ALL PRIOR WATER RIGHTS.
- b. Proof of construction of works and application of water to beneficial use shall be submitted on or before February 1, 19 83.
- c. The rate of diversion, if water is to be used for irrigation under this permit, when combined with all other water rights for the same land shall not exceed 0.02 cubic feet per second for each acre of land.
- d. Other: Return flow if discharged to a subsurface system must be authorized by a separate injection well permit, and return flow if discharged to a surface water system shall meet Idaho Water Quality Standards.

Witness my hand this 4th day of January, 19 82.

J. Glen Saylor
Chief, Operations Bureau

MICROFILMED

Proof of Publication

The Post-Register

State of Idaho,
County of Bonneville } ss.

I, J. Robb Brady, first being duly sworn, depose and say: That I am the Principal Clerk of The Post Company, a corporation of Idaho Falls, Bonneville County, Idaho, publishers of The Post-Register, a newspaper of general circulation, published daily, except Saturday, at Idaho Falls, Idaho; said Post-Register being a consolidation of the Idaho Falls Times, established in the year 1890, The Idaho Register, established in the year 1880 and the Idaho Falls Post, established in 1903, such consolidation being made on the 1st day of November, 1931, and each of said newspapers having been published continuously and uninterruptedly, prior to consolidation, for more than seventy-eighty (78) weeks and said Post-Register having been published continuously and uninterruptedly from the date of such consolidation, up to and including the last publication of notice hereinafter referred to.

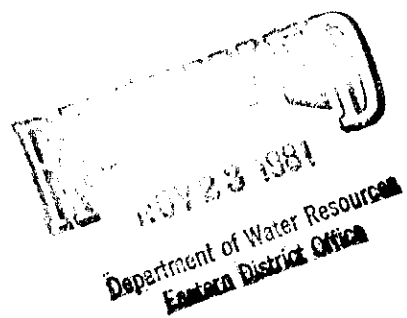
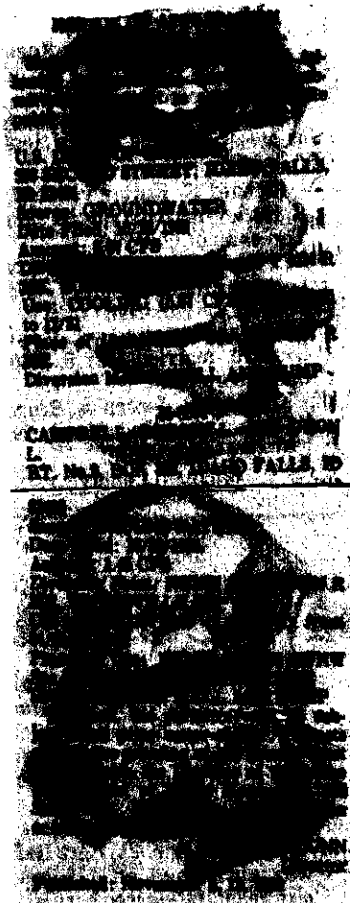
That the notice, of which a copy is hereto attached and made a part of this affidavit, was published in said Post-Register for two consecutive weeks, first publication having been made on the 5th day of November, 1981, last publication having been made on the 12th day of November, 1981, and that the said notice was published in the regular and entire issue of said paper on the respective dates of publication, and that such notice was published in the newspaper and not in a supplement.

Subscribed and sworn to before me, this 18th day of November, 1981.

Neon R. Napier
Notary Public

My commission expires September 30, 1984.

B10, 1M,



MICROFILMED

February 8, 1988

U.S. DEPT. OF ENERGY
550 2ND ST.
IDAHO FALLS, ID 83401

RE: Permit No. 25-7263

Dear Permit Holder(s):

Enclosed herewith is a copy of the Water Right License issued on the above referenced permit.

Sincerely,

JIM JOHNSON
Water Rights Supervisor

JJ:sc

Enclosure

RECORDED

FEB 25 1988

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
LICENSING REPORT

RECEIVED
JAN 30 1986

25-7263
Permit No.

1. Measurement Calculations

Department of Water Resources

a) Field Measurement Calculations (Include theoretical capacities and system capacity)

$$Q = \frac{H_p (8.814) \text{ cfs}}{\text{head} + (P_s \times 2.308)} = \frac{25(8.815)(0.885)}{254 \text{ ft} + [(2.305)(15 \text{ psi})]} = \frac{195.01}{288.62} = 0.68 \text{ cfs}$$

$$\begin{array}{l} \text{HEAD} = \text{Pumping Depth} \approx 205' \\ \text{Lift to Exchangers} \quad 49' \\ \hline 254 \end{array}$$

$$Q_{\text{LIMITED BY PERMIT}} = 0.67 \text{ cfs}$$

b) Volume Calculations for Irrigation:

$$\begin{array}{l} V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = \underline{\hspace{2cm}} \\ V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 = \underline{\hspace{2cm}} \\ V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = \underline{\hspace{2cm}} \end{array}$$

c) Volume Calculations for Other Uses: Cooling Period of use May 1 to Oct 1 = 153 days

$$\begin{array}{l} V = [0.67 \text{ cfs} \times 1.9835 \times (153 \text{ days})] = 203.33 \text{ afa} \\ \text{Assume 75\% operation time: Therefore } (0.75)(203.33) = 152.5 \text{ afa} \end{array}$$

2. Overlap Review

a) Other water rights with same place of use: NONE

b) Other water rights with same point of diversion: NONE

c) Analysis:

RECEIVED

FEB 25 1986

RECOMMENDED AMOUNTS

- | Permit No. | Priority | Amount | App. Date | Date Proof Submitted | System Capacity |
|------------|----------|--------|-----------|----------------------|-----------------|
| 25-7263 | 10-26-81 | 0.67 | 10-26-81 | 11-5-82 | 0.68 |

4. Permit Holder: U.S. Department of Energy

Address: 550 Second Street - Idaho Falls, Id. 83401

5. Source: Groundwater tributary to _____

6. Beneficial Use	Period of Use		Rate of Diversion	Annual Volume
	From	To	Q (cfs)	V (afa)
Cooling	5/1	10/1	0.67	152.5

Allowable Maximums: _____

7. Point(s) of Diversion:

[illegible]

8. Place(s) of Use

Twp.	Rge.	Sec.	NE 1/4				NW 1/4				SW 1/4				SE 1/4				Totals
			NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	
20	38E	7										L							

9. Recommended Conditions/Remarks: _____

In conversation with John Beal it was found that DOE does have an injection well application in processing ^{6, ILF} as of 27 Jan 1986. Kcw

10. Recommended Amendments

☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ None

☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

11. Examiner's Signature Keith C. Wilson Date 3 Jan 1986

Checked in Regional Office by Dary Spackman Date 1-09-86

Approved in State Office by Kon^v Howerton John H. 2nd Date 12-22-87

RECEIVED

FEB 25 1988

Date: 3 Jan 1986

Date 1-09-86

Date 12-22-87

JAN 20 1980

Department of Water Resources

Permit No. 25-7263

Phone No. 526-0275

- 1925

1. Owner: U.S. Dept of Energy
Current Address: 550-2nd Idaho Falls Id

2. Accompanied by: Cliff Clark EXAM. DATE: 15 June 1984
Address: 550-2nd Phone No. 526-1122
Relationship to Permit Holder: EMPLOYEE

3. Source: Groundwater tributary to _____

Well/Diversion* No.	Motor Make	HP	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
	Berkeley	25	8134913	Berkeley	8134913 6" disch.

*Code with points of diversion, system diagram & photos on reverse side. Disregard if only one.

5. **System Description** (As operating at time of measurement. Indicate pressure, number of sprinklers, etc.)

well, pump distribution lines to Two water-to-air heat exchangers then discharge to injection well - cooling only

6.	Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Cano. Date
	Theoretical						

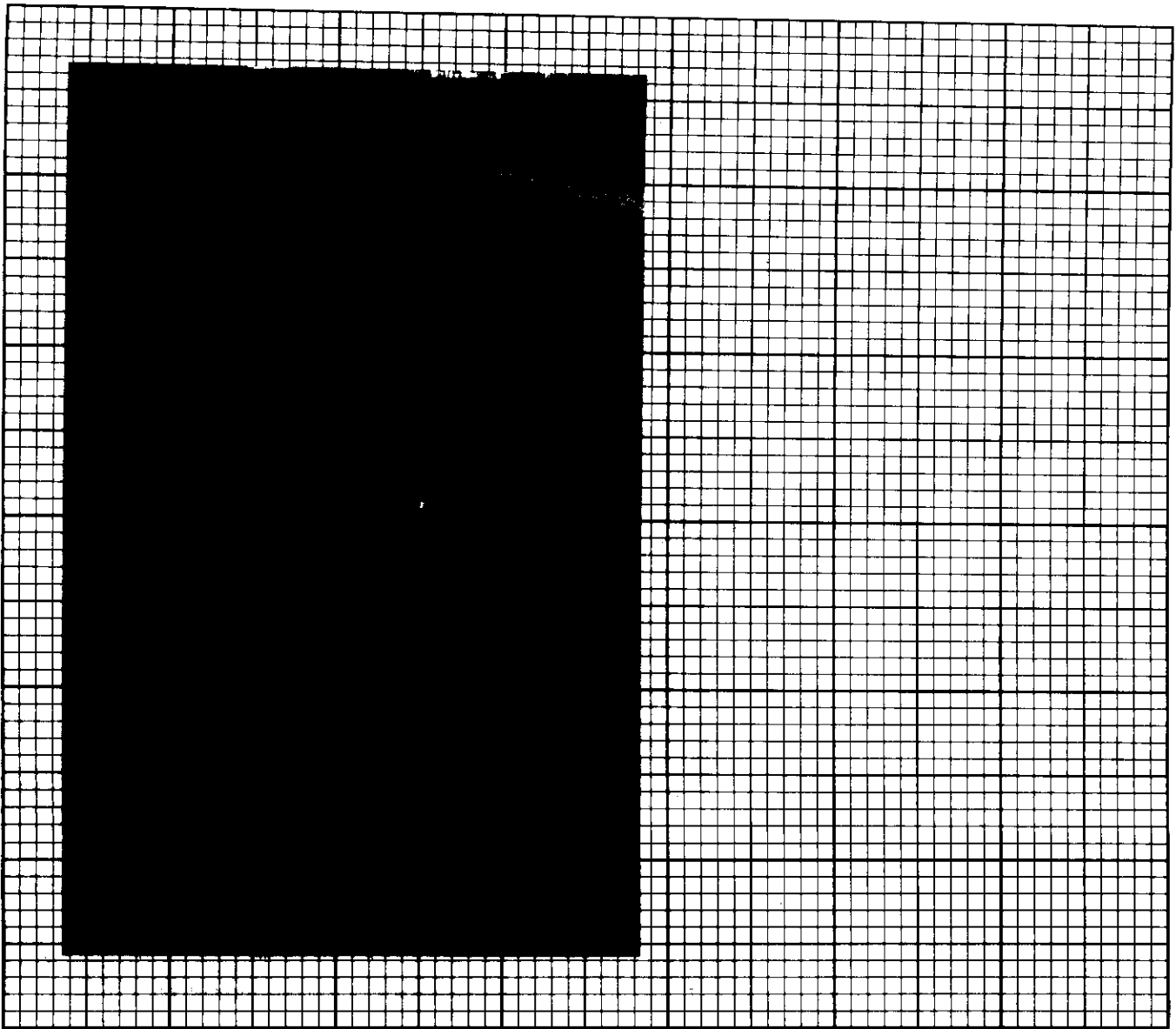
7. Measurements Static H₂O Level 155' ☐ Additional data/computation sheets attached
Addition lift to exchangers 49'
Operating pressure at exchangers < 15 psi

Period of use 1 May to 1 Oct

8. Point(s) of Diversion:	Indicate Method of Determination
---------------------------	----------------------------------

[illegible][illegible]

10. Other water rights on these lands _____
11. Other water right diverted from same p.d. NONE
12. **Diversion and Delivery System Diagram:** Indicate all major components and distances between components. Indicate ditch size/pipe i.d. as applicable. Indicate on systems with measurement port the distance between the port and the nearest component/pipe bend/restriction both upstream and downstream, and the inside pipe diameter at the measurement port. On multiple diversion systems indicate how diversion systems are connected.



13. ☒ **Photo of Diversion & System Attached** ☐ **Aerial Photo of Place of Use Attached or Map of Irrigated Acreage Attached**

14. Remarks _____

15. Recommended Amendments
- | | | |
|---|--|--|
| ☐ Change P.D. as reflected above | ☐ Add P.D. as reflected above | ☒ None |
| ☐ Change P.U. as reflected above | ☐ Add P.U. as reflected above | ☐ Other |

16. Examiner's/Consultant's Signature Keith C Wilson Date 15 June 1984

Consultant's License Number _____

IDWR Director's Authorization to Conduct

Beneficial Use Examination _____

Date

RECORDED

CONSULTANT SEAL

FEB 25 1988

3 Phase 60 Cycles
230,460,575 Volts
40°C. Ambient-C.Rise WP-1

HOLLOSHAFT & SOLIDSHAFT MOTORS
TYPICAL OPERATING CHARACTERISTICS

RPM			EFFICIENCY			POWER FACTOR			CURRENT IN AMPHERES 460 VOLTS	
HP	NO LOAD	FULL LOAD	FULL LOAD	3/4 LOAD	1/2 LOAD	FULL LOAD	3/4 LOAD	1/2 LOAD	FULL LOAD	LOCKED STARTING
2	900	860	75.0	74.5	70.0	68.0	60.0	47.5	3.9	18.0
	1800	1720	80.0	79.5	75.5	81.0	72.5	59.5	4.4	32.0
3	1200	1155	78.5	78.0	75.0	69.0	61.0	49.0	5.4	23.0
	900	860	78.5	79.0	75.5	67.5	59.0	46.0	5.8	30.5
5	3600	3480	81.0	82.0	80.5	86.0	80.5	69.5	6.9	45.0
	1800	1725	81.5	82.0	79.5	84.0	76.5	63.5	7.0	47.0
7 1/2	1200	1160	81.0	81.0	78.0	71.0	62.5	50.0	8.5	40.0
	900	875	80.5	80.0	77.0	72.0	64.0	51.0	8.2	44.0
10	3600	3460	84.0	85.0	84.0	88.0	84.0	75.5	9.8	63.0
	1800	1740	83.5	84.0	82.5	84.0	80.0	71.5	10.4	63.5
15	1200	1170	83.0	83.5	81.0	80.5	74.0	61.5	10.5	63.0
	900	875	80.5	80.5	77.5	71.5	63.0	50.5	12.5	63.0
20	3600	3500	83.5	84.0	83.0	87.0	84.0	76.5	13.4	79.0
	1800	1740	86.5	87.0	85.5	81.0	75.0	64.0	13.3	82.0
25	1200	1165	82.5	82.5	80.0	78.5	70.0	57.0	14.0	80.0
	900	875	86.0	86.5	84.5	72.0	65.0	53.0	15.5	81.0
30	3600	3485	85.0	86.5	86.0	88.5	87.0	82.0	19.5	112.0
	1800	1765	85.5	86.5	85.0	81.0	73.5	61.5	20.5	112.0
40	1200	1160	87.5	89.0	89.0	85.0	82.0	74.5	19.4	115.0
	900	870	86.0	87.5	86.5	75.5	69.5	58.5	22.5	116.0
50	3600	3515	85.5	87.0	87.0	89.0	87.5	82.5	25.4	145.0
	1800	1765	88.0	89.0	89.0	85.0	82.5	75.0	26.0	143.0
60	1200	1160	88.0	89.5	89.0	85.0	81.5	74.0	25.8	145.0
	900	880	85.0	86.5	86.0	74.5	69.0	57.0	30.5	140.0
75	3600	3510	89.0	90.0	89.0	88.5	87.0	81.0	30.4	172.0
	1800	1755	88.5	90.0	89.5	83.0	78.5	68.5	32.5	180.0
100	1200	1180	85.5	87.0	86.5	84.0	79.0	68.0	33.5	193.0
	900	880	86.0	88.0	87.5	77.0	72.0	61.0	36.5	175.0
125	3600	3510	89.5	90.5	89.5	87.5	85.0	78.0	37.0	218.0
	1800	1755	89.0	90.0	89.5	80.5	75.0	63.5	40.0	217.0
150	1200	1175	86.5	88.5	89.5	86.0	84.0	78.0	38.5	215.0
	900	880	88.0	89.5	89.5	75.0	70.0	59.5	43.5	205.0
200	3600	3515	90.0	91.0	90.0	86.5	83.0	75.0	48.5	310.0
	1800	1770	88.0	89.5	89.0	86.0	82.0	73.0	51.0	292.5
250	1200	1175	87.5	89.5	90.0	84.5	81.0	72.0	52.0	292.0
	900	875	88.0	90.0	90.0	76.0	71.5	61.0	57.5	280.0
300	3600	3540	88.0	89.5	89.0	87.0	84.5	78.0	63.0	350.0
	1800	1765	89.0	90.5	90.5	84.5	81.0	72.0	64.0	339.5
400	1200	1170	88.0	90.5	91.0	85.0	83.0	76.5	64.0	370.0
	900	875	88.5	90.0	90.0	80.0	76.0	67.0	68.0	325.0
500	3600	3540	89.5	91.0	91.0	89.0	89.0	86.0	72.5	410.0
	1800	1770	90.0	91.0	91.0	86.0	83.0	75.0	75.0	454.5
600	1200	1175	88.5	90.0	89.5	85.5	82.0	72.5	76.0	460.0
	900	875	89.0	90.5	90.5	80.5	77.0	68.0	80.5	410.0

FEB 25 1988

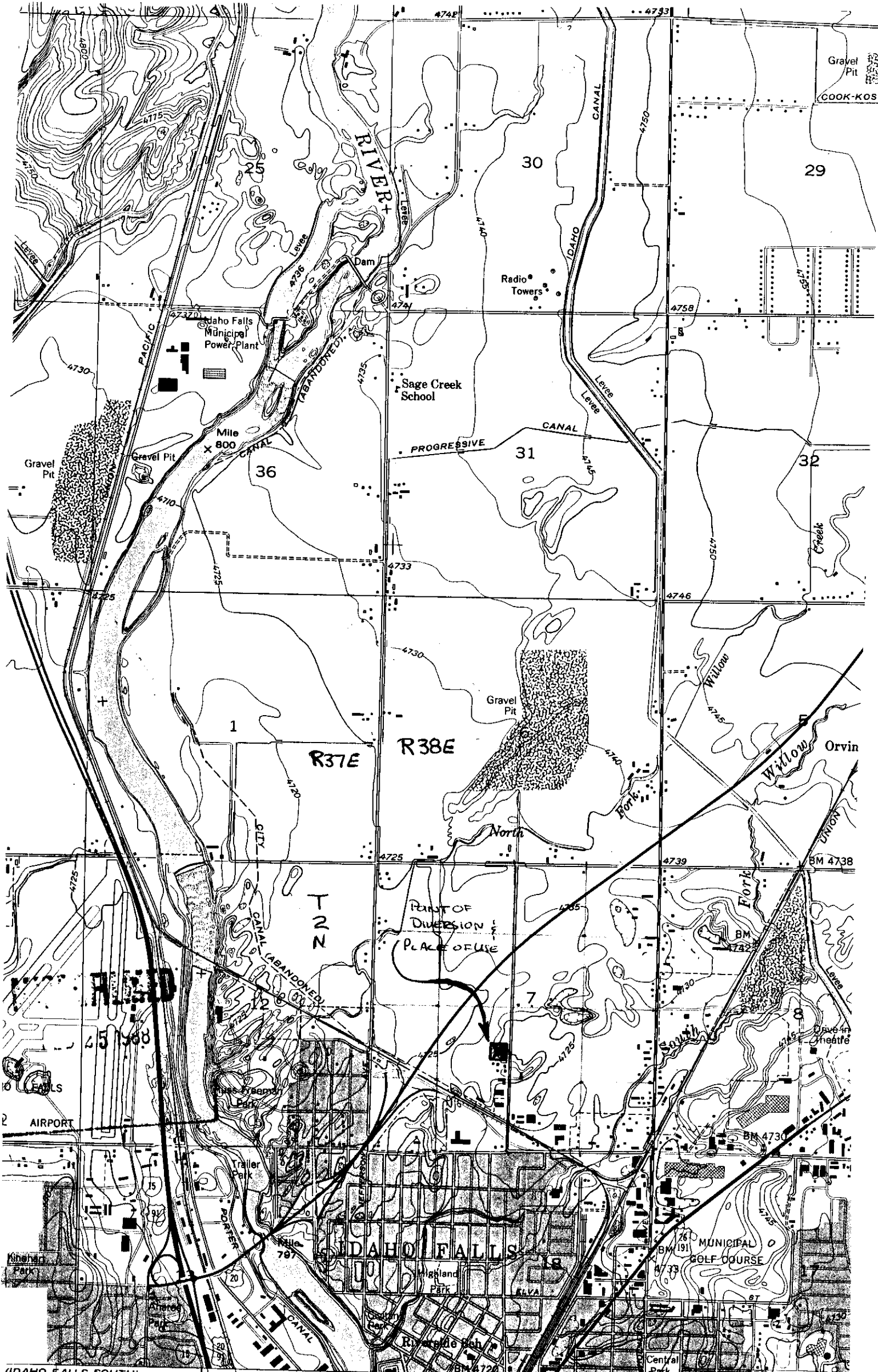
25-7263

Kaw

3 Phase 60 Cycles
230,460,575 Volts
40°C. Ambient-60°C
Rise WP-1

HOLLOSHAFT & SOLIDSHAFT MOTORS
TYPICAL OPERATING CHARACTERISTICS

HP	RPM		EFFICIENCY			% POWER FACTOR			CURRENT IN AMPHERES* 460 VOLTS	
	NO LOAD	FULL LOAD	FULL LOAD	3/4 LOAD	1/2 LOAD	FULL LOAD	3/4 LOAD	1/2 LOAD	FULL LOAD	LOCKED LOAD (STARTING)
75	3600	3535	90.5	92.0	92.0	89.0	89.0	86.0	90.0	525.0
	1800	1770	91.5	92.5	92.5	87.0	84.5	78.0	91.0	594.0
	1200	1175	89.5	91.0	91.0	87.5	85.0	78.5	92.0	576.0
	900	880	89.0	90.5	91.0	82.0	79.0	70.0	99.0	520.0
100	3600	3540	92.5	93.5	94.0	88.5	87.5	83.6	117.0	745.0
	1800	1775	91.0	92.5	92.5	84.0	81.5	74.0	124.0	685.0
	1200	1170	91.5	92.5	93.0	85.5	84.0	79.0	123.5	690.0
	900	880	89.0	91.0	91.5	81.5	77.0	67.0	133.0	740.0
125	3600	3545	92.5	93.5	93.5	90.5	89.5	86.0	143.0	1045.0
	1800	1775	92.0	93.0	93.5	86.5	85.0	80.0	150.0	934.0
	1200	1175	91.5	93.0	93.0	86.0	85.0	81.0	153.5	865.0
	900	875	89.5	91.1	91.3	82.5	78.0	68.0	158.0	963.8
150	3600	3545	94.0	94.5	94.5	91.0	90.0	86.0	170.0	1325.0
	1800	1770	92.0	93.0	93.0	87.5	86.0	80.0	180.0	1051.0
	1200	1175	92.5	93.5	93.5	84.5	82.0	74.0	178.0	1077.0
	900	885	91.5	92.2	91.7	82.5	78.0	68.0	186.0	1172.0
200	3600	3550	92.0	92.5	92.0	91.0	90.5	87.0	230.0	1490.0
	1800	1770	92.5	93.5	93.5	87.0	84.5	77.5	238.0	1645.0
	1200	1180	91.5	92.2	91.8	87.0	85.5	80.0	235.0	1575.0
	900	885	91.7	92.4	92.0	83.5	81.0	72.5	245.0	1544.0
250	3600	3545	93.0	93.3	92.7	89.1	87.9	83.7	278.0	1815.0
	1800	1770	93.0	93.5	93.0	87.3	84.9	78.1	284.0	1825.0
	1200	1180	91.2	91.9	91.5	87.5	86.0	81.0	293.0	1904.0
	900	885	92.1	92.8	92.6	84.0	81.0	72.5	303.0	1894.0
300	1800	1770	91.6	92.3	91.8	89.5	88.0	84.0	343.0	2195.0
	1200	1175	92.3	93.2	93.2	87.5	86.5	81.5	348.0	2332.0
	900	880	92.3	92.6	92.8	88.5	87.5	82.0	344.0	2064.0
	1800	1775	92.0	92.7	91.8	89.5	88.0	82.0	398.0	2587.0
350	1200	1180	91.7	92.0	91.1	88.0	86.0	80.0	406.0	2720.0
	900	880	92.6	92.9	93.0	88.5	87.5	81.5	400.0	2560.0
	1800	1770	92.1	92.8	92.6	89.0	88.0	84.0	457.0	2788.0
	1200	1180	91.7	92.0	91.2	88.0	86.0	80.0	464.0	2900.0
400	900	880	92.2	92.3	92.2	86.5	84.0	77.0	470.0	2773.0
	1800	1770	92.5	93.2	92.9	89.5	88.0	84.0	509.0	3181.0
	1200	1180	91.9	92.2	92.7	88.0	86.0	80.0	521.0	3256.0
	900	880	92.2	92.3	92.2	85.0	81.5	73.0	538.0	3362.0
450	1800	1775	93.1	93.8	93.7	89.5	88.0	82.5	562.0	3793.0
	1200	1180	92.0	92.3	91.9	88.0	86.0	80.5	578.0	3757.0
	900	880	91.5	92.3	92.1	85.0	81.5	73.5	602.0	3461.0
	1800	1775	93.1	93.8	93.7	89.5	88.0	82.5	562.0	3793.0



SCALE 1:24000

145 R. 37 E.
BLACKFOOT 23 MI.
POCATELLO 52 MI.

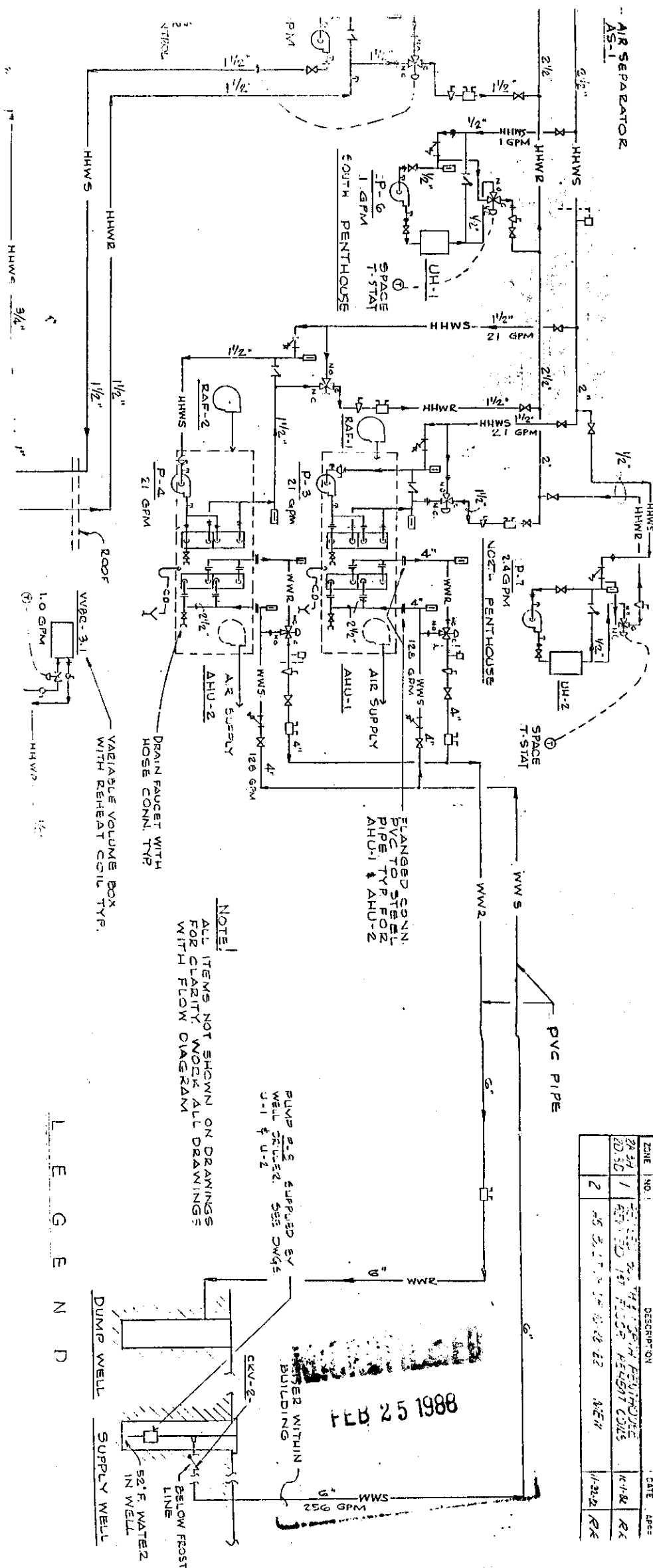
2'30" R. 38 E.

SHELLY 9.4 MI.
POCATELLO 52 MI.

25-7263 kaw

INTERIOR GEOLOGICAL SURVEY, RI
418000m.E.

REV. NO.		DESCRIPTION	DATE	FILE
2	1	RECEIVED 1ST FLOOR PLUMBING CO'S	11-1-82	RA
		RECEIVED 1ST FLOOR PLUMBING CO'S	11-22-82	RA



LEONARD

FEB 25 1988

25-7263

Kaw



STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
EASTERN REGION

John V. Evans
Governor

A. Kenneth Dunn
Director

150 Shoup
Idaho Falls, Idaho 83401
(208) 525-7161

RE:

Dear

We acknowledge receipt of your statement submitted as proof of beneficial use for the above referenced permit.

Before a license can be issued, a field examination must be made by a representative of this Department.

_____ A field examination of your system has been scheduled for _____.

If this time and date is not convenient for you, please contact this office as soon as possible.

_____ A field examiner will contact you to arrange to examine your system.

If you have any questions regarding the field examination, please contact this office.

Sincerely,

DEPARTMENT OF WATER RESOURCES

The Idaho Department of Water Resources will consider this card statement that the permit holder(s) has completed development to the extent shown below Permit No. 25-7263

Name(s) of Permit Holder: U.S. Department of Energy

Post Office Address: 550 Second Street

Idaho Falls, ID 83401 Tel. No. 208-526-0275

Source of Water: Groundwater

Extent of Use: ☐ Domestic (number of households)
☐ Stockwater (number and type of stock)
☐ Irrigation (acres)
☒ Other cooling water

Measuring Device: Required? ☐ Yes ☒ No Installed? ☐ Yes ☒ No

Access Port: Required? ☐ Yes ☒ No Installed? ☐ Yes ☒ No

The above information is a true statement of the extent to which the above numbered permit has been developed.

11-2-82

Date

Nick C. Aquilino
Signature of Permit Holder

PLACE
TEN CENT
STAMP
HERE



IDAHO DEPARTMENT OF WATER RESOURCES
STATEHOUSE
BOISE, IDAHO 83720



Department of Energy
Idaho Operations Office
550 Second Street
Idaho Falls, Idaho 83401

November 2, 1982

David R. Tuthill, Jr., P.E.
Supervisor, Water Allocation Section
Department of Water Resources
Statehouse
Boise, ID 83720

SUBJECT: PERMIT NO. 25-7263 - PROOF OF BENEFICIAL USE

Dear Mr. Tuthill: *DRT*

Please find attached the "Proof of Beneficial Use" needed to complete the referenced permit requirements. This Proof is provided to you by the U.S. Department of Energy for notification purposes only, as a matter of comity, and is not meant to be nor should it be construed as a waiver or surrender in any manner of any and all rights the United States may have to the subject waters.

As regards your conditions on page four of the approved permit application, since Idaho has not yet been granted primacy by the U.S. Environmental Protection Agency to administer the underground injection control program, the U.S. Department of Energy is unable to apply for an injection well permit for the return well. However, our office has supplied information describing that well to the Department of Water Resources, and a copy of that letter is attached for your information.

Very truly yours,

Nick C. Aquilino
Nick C. Aquilino
Deputy Manager

Attachments (2)

NOV 12 1981

Idaho Department of Water Resources
150 Shoup Avenue
Idaho Falls, ID 83401

ATTENTION: Jerry Ramsey

Dear Sir:

This office is currently responsible for the construction of DOE's Idaho Laboratory Facility located on North Boulevard in Idaho Falls, Idaho. This facility will be used for non-nuclear research purposes and attendant offices. As part of the facility design, the architect engineer included a closed cycle heat exchange system for heating and cooling purposes. This system requires the use of water pumped from the aquifer to be passed through the heat exchanger and then returned to the aquifer. The water is untreated and the only effect on the water from this process is to decrease the water's temperature by a few degrees.

Since Idaho has not yet been granted primacy by the Environmental Protection Agency to administer the underground injection control program, this office is unable to submit an injection well permit for this activity. However, in accordance with our policy of cooperation with the State as regards our operations, we are supplying your office, as a matter of comity, information requested under the Idaho Waste Disposal and Injection Well Act.

The return well is located in the NE 1/4 of the SW 1/4 of Section 7, Township 2N, Range 38E, Bonneville County. The return well is on the west side of the facility with the supply well located approximately 300 feet to the southeast. Denning Well Drilling, Ucon, Idaho, was awarded the well drilling subcontract and began drilling last month. The return well is eight inches in diameter down to eighteen feet below the surface and then six inches in diameter to a depth of 100 feet. Six-inch casing is installed down to the 100-foot level. The well is sealed by a cement slurry to an eighteen-foot depth. The well log is available for inspection from the driller if additional information is required.

The system is designed for a maximum rate of discharge of untreated water of 300 gpm. The frequency of discharge will be seasonal depending upon the need for heating and cooling. The closest domestic well is located approximately 500 feet to the southeast from the return well. The drawings and specifications for the Laboratory's water and sewer facilities were previously provided to the State. However, this information is available for review by contacting Ralph Halstead, EG&G Idaho, Inc. at 526-0059.

NOV 12 1981

Please contact R. J. Beers of this office at 526-1925 if additional information on this return well is desired. We anticipate that the well will be completed in the near future.

Very truly yours,

Original signed by
Nick C. Aquilina

Nick C. Aquilina
Deputy Manager

S T A T E O F I D A H O
D E P A R T M E N T O F W A T E R R E S O U R C E S

STATEHOUSE
BOISE, IDAHO 83720
(208) 334-4440

U.S. DEPT. OF ENERGY
550 SECOND STREET
IDAHO FALLS, ID 83401

JANUARY 13, 1982

RE: PERMIT NO. 25-7263

DEAR PERMIT HOLDER:

ENCLOSED IS A COPY OF YOUR APPROVED APPLICATION FOR PERMIT. WE DIRECT YOUR ATTENTION TO THE CONDITIONS OF APPROVAL ON THE FOURTH PAGE.

WE HAVE ENCLOSED A FORM ENTITLED "MAKING PROOF OF BENEFICIAL USE". PLEASE READ THE INSTRUCTIONS CAREFULLY SINCE YOU MUST TAKE FURTHER ACTION TO DEVELOP THIS PERMIT INTO A LICENSE.

SINCERELY,

DAVID R. TUTHILL, JR., P.E.
SUPERVISOR, WATER ALLOCATION SECTION

ENCLOSURE

RECEIVED
JAN 14 1982
WATER ALLOCATION SECTION

State of Idaho
Department of Water Resources

APPLICATION FOR PERMIT ANALYSIS SHEET

25 7263

INITIAL REVIEW BY: HWS

APPLICATION NUMBER: 25-7263

CHECK:

- ☒ Source.
☒ Point of diversion.
☒ County.
☒ Quantity of water and period of use.
☒ Description of diverting works.
☒ Time required for beneficial use of water.
☒ Place of use or acres irrigated.
☒ Map.
☒ Signature.
☒ Fee.
☒ Yes ☒ No Field check required.
☒ Yes ☒ No Critical groundwater area.
☒ Yes ☒ No Request dam safety information. Sent by: _____ Date: _____
☒ Yes ☒ No* In form to receipt.

Field check by: _____

Date: _____

Comments: _____

*REQUEST THE FOLLOWING ADDITIONAL INFORMATION FROM THE APPLICANT:

Ernie, I feel this application should be conditioned
to say the Dept. does not recognize the use
of an injection well as an integral part of this
system.
HWS

SEND COPIES TO:

- ☐ Idaho State Health Department. Copies sent by: _____ Date: _____
☐ Idaho Fish and Game Department. _____
☐ Idaho Department of Lands. _____
☐ U.S. Bureau of Land Management. _____
☐ U.S. Forest Service. _____
☐ Other _____

PROCESSING:

- ☐ Yes ☒ No Platted by: _____ Map No. _____
☐ Yes ☒ No Other rights on same place of use. _____
☒ Yes ☐ No* In form for advertising. Nov 23 1981 ✓
☐ Yes ☒ No Final date for protests: _____
☐ Yes ☒ No Protests received. If yes, record information on 4th page of application.

FINAL REGIONAL PROCESSING REVIEW:

- ☒ Affidavit of publication received. Date: 11-23-81 ✓
☒ Application published correctly. If not, record action taken: _____
☒ Fee amount, receipt date & number, recorded on application.
☒ Publication dates and paper, recorded on application.
☒ Protests, dates, withdrawal, etc., recorded on application.
☒ Recommendation & initial, recorded on application.
☐ Yes ☒ No Measuring device required.
☐ Yes ☒ No Access port required.
☐ Yes ☒ No Will water be delivered by watermaster? If yes, what district? _____
☒ 10-26-81 Date of priority recommended.
☒ Special conditions of approval or cover letter. _____

By: Ernest Carlson Date: Dec 7, 1981

STATE OFFICE REVIEW:

SLW/cand OAC

- ☐ See attached sheet for more information.

By: Robyn Date: 12/30/81

RECEIVED
DEC 09 1981

M E M O

TO: File
FROM: Ernie *ER*
DATE: December 4, 1981

Shortly after receipting this application the Department of Energy was contacted and advised that an injection well application would have to be filed prior to drilling the injection well and subsequently using it to dispose of the cooling water. Their response was an emphatic refusal to file such an application. Physical examination of the place of use revealed the injection well had already been drilled. Further investigation determined that Denning Well Drilling did the work. Because there was no permit issued by the Department, Denning's well drilling license was revoked.

In considering a final recommendation on this application, it seems reasonable to condition the permit so that diversion of water is subject to compliance with Section 42-3904 of the Idaho Code.

MICROFILMED

NEW WAFER-RIGHT-FILINGS

COMITY AND IS NOT A WAIVER. PAYMENT IS TENDERED UNDER PROTEST

YOUNGHANS, LARENE M.
:06 CFS T03S R35E

SOURCE: GROUNDWATER
TRIBUTARY:
REMARKS: 50 CATTLE, 10 HORSES, 20 PIGS AND WELL FOR TWO HOMES

03 CFS
511 T03S R35E

27-7292 BRADLEY, ROBERT V. 10-21-1981 IRRIGATION 03-15 11-15 NEW 503 APPLICATION

P/U:	T02S	R36E	S34	SENAT(40)	NESW(40)	SESW(40)	NNSE(40)	SWSE(40)	SESE(32)
P/U:	T03S	R36E	S03	LT01 (NENE)(08)	LT01 (NNNE)(35)	LT04 (SNEE)(04)	LT02 (NENN)(33)	LT03 (NNNW)(28)	LT04 (SENN)(03)

DAVIS, TRESSA
 .30 CFS T07S R35E S23 T07S R35E

POCATELLO ID 83201
SOURCE: POKTNEUF RIVER
REMARKS: 20 CATILE
TRIBUTARY: SNAKE RIVER
W.M. control

STOCKWATER 01-01 17-3 SAME AS OTHER USE

* *
***AFA
*
.32+CPS

29-4208 HATCH, WILLIAM N. 04-02-1883 IRRIGATION-03-15-09-15 NWSN 507 SESW(40) SWSB(40) STARRY CUN
BOX 413 1.11 CFS T07S R39E S12 T07S R39E
HYDE PARK UT 84318 NENET(40) NWNET(40)

SOURCE: EIGHTEEN MILE CREEK
TRIBUTARY: SINKS
REMARKS: 50 CHITLE

MICROFILMED

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
Eastern Region

150 Shoup Ave.
Idaho Falls, Idaho 83402
(208) 525-7161

OCTOBER 29, 1981

The Post Register
P. O. Box 1800
Idaho Falls, Idaho 83401

Gentlemen:

Enclosed you will find a legal notice which we wish to have published on the dates indicated (once a week for two consecutive weekly issues) in your newspaper. We have allowed ample time for you to submit a galley proof to this office for review before the first publication date. If you cannot publish the notice on the proposed dates, please contact us immediately.

An affidavit of publication must be submitted to the Department along with the publication bill. Your cooperation is appreciated.

Please send the affidavit of publication and publication billing to this office before NOVEMBER 23, 1981.

Yours truly,

RONALD D. CARLSON
Supervisor
Eastern Region

Encl.

MICROFILMED

NOTICE OF APPLICATION FOR WATER RIGHT

Notice is hereby given that the following application(s) have been submitted for permit to appropriate the public waters of the State of Idaho:

If issued, the permit(s) will be subject to all prior water rights. Protests against the granting of any permit must be filed with the Director of the Idaho Department of Water Resources, 150 Shoup Ave., Idaho Falls, Idaho 83402 on or before NOVEMBER 23, 1981.

A. KENNETH DUNN

Director

Published 11/5 & 11/12/81.

MICROFILMED

25-2263-

U.S. DEPT. OF ENERGY

550 SECOND STREET, IDAHO FALLS, ID 83401

Source: GROUNDWATER

Date Filed: 10/26/1981

Amount: 0.67 CFS

Diversion Point: NESW Sec 07 T 02N R 38E, BONNEVILLE Co.

Use: COOLING (0.67 CFS) from 01/01 to 12/31

Place of Use: NESW Sec 07 T 02N R 38E

Diversion Means: WELL AND PUMP

U-S-8

MICROFILMED



Department of Energy
Idaho Operations Office
550 Second Street
Idaho Falls, Idaho 83401

October 23, 1981

Idaho Department of Water Resources
1515 Lincoln Road
Idaho Falls, ID 83401

Dear Sir:

We are submitting for your information the attached "Application for Permit to Appropriate the Public Waters of the State of Idaho" describing water to be produced from a well at DOE's Idaho Laboratory Facility. This Application is provided to you by the U.S. Department of Energy for notification purposes only, as a matter of comity, and is not meant to be nor should be construed as a waiver or surrender in any manner of any and all rights the United States may have to the subject waters. The payment enclosed with this application is tendered under protest and should not be considered nor is it an admission of liability by the United States for any payment pursuant to this submittal.

Very truly yours,


Nick C. Aquilina
Deputy Manager

Enclosure
As Stated

MICROFILMED

