

State of Idaho
Department of Water Resources

WATER RIGHT LICENSE
WATER RIGHT NO. 45-07688

Priority: February 14, 1991

Maximum Diversion Rate: 0.82 CFS
Maximum Diversion Volume: 208.0 AF

This is to certify, that LYNN MITCHELL
DELL MITCHELL

RT 1 BOX 38B
DECLO ID 83323

has complied with the terms and conditions of the permit, issued pursuant to Application for Permit dated February 14, 1991; and has submitted Proof of Beneficial Use on June 3, 1992. An examination indicates that the works have a diversion capacity of 2.040 cfs of water from a GROUNDWATER source, and a water right has been established as follows:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>RATE OF DIVERSION</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	04/01 to 10/31	0.82 CFS	208.0 AF

LOCATION OF POINT(S) OF DIVERSION: SENESW , Sec. 1, Township 10S, Range 24E
CASSIA County

PLACE OF USE: IRRIGATION

<u>TWN</u>	<u>RGE</u>	<u>SEC</u>	<u>ACRES</u>	<u>ACRES</u>	<u>ACRES</u>	<u>TOTAL</u>
10S	24E	1	NESW 11	SWSW 7	SWSE 34	52

Total number of acres irrigated: 52

CONDITIONS/REMARKS:

1. The maximum diversion volume is defined as the maximum allowable volume of water that may be diverted annually from the source under this right. The use of water confirmed by this right is limited to the amount that can actually be beneficially used. The maximum diversion volume may be adjusted to more accurately describe the beneficial use or to implement accepted standards of diversion and use efficiency.
2. This water right is appurtenant to the described place of use.
3. This right is subject to all prior water rights and may be forfeited by five years of non-use.
4. Modifications to or variance from this license must be made within the limits of Section 42-222, Idaho Code, or the applicable Idaho law.
5. This right is for the use of trust water and is subject to review 20 years after the issuance of the permit to determine availability of water and to re-evaluate the public interest.
6. Diversion and use of water under this right is subject to an annual use fee if rules are subsequently promulgated which provide for the submittal of the fee.
7. The Director retains jurisdiction of the right issued to change, add or remove any requirement as determined to be appropriate.

AUG 15 1994

State of Idaho
Department of Water Resources

WATER RIGHT LICENSE

WATER RIGHT NO. 45-07688

CONDITIONS/REMARKS:

8. The right holder shall fully use all surface water rights appurtenant to the lands identified above prior to using water under this right.
9. This right uses the same well as Right 45-07454 and when combined with Right 45-07454 shall not exceed a diversion rate of 2.04 cfs nor provide more than 4.0 afa per acre for the lands above.

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 29th
day of July, 1994.

Acting for  R. Keith Higginson, Director

AUG 15 1994

RECEIVED

JUN 0 1992

Department of Water Resources
Southern Region Office

STATE OF IDAHO

DEPARTMENT OF WATER RESOURCES

PROOF OF BENEFICIAL USE

OFFICE USE ONLY

Amt. of Fee \$ 125
Date 6/3/92
Receipt No. 5014602
Receipt by df

The Idaho Department of Water Resources considers this form a statement that the permit holder(s) has/have completed all development that will occur under this permit and that water has been applied according to the provisions of the permit for the beneficial use(s) described below. This form must be accompanied by a license examination fee, when necessary, or a completed field examination report prepared by a certified water right examiner who has been appointed by the department.

1. Permit No. 45-07688 Telephone No. Home 654-2451 Work 6735301
2. Name(s) of Permit Holder(s): Lynn Mitchell Dell Mitchell
3. Mailing Address: Route 1 Box 38 A - Declo Idh 83323
4. Source of Water: Ground Water -

If GROUNDWATER, Well Driller's Name: Ray L Commons Date Drilled: 1977 ?
Same As 45,07454

OPTIONAL:

Pump horsepower: 65 Pressure (psi): 60 Dynamic pumping level (ft.): 60 ?

5. Extent of Use (as authorized by the permit):

Domestic _____ (No. of households) Stockwater _____ (No. and type of stock)

Irrigation 54 (No. of acres) Other _____

6. Total rate and/or volume for which proof is submitted 1.10 cfs OR _____ acre/feet

7. Refer to the approval conditions on your permit and respond accordingly:

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

OR

Flow Measurement Port: Required? ☒ Yes ☐ No Installed? ☒ Yes ☐ No

8. Fee Enclosed: \$ 125 (See License Fee Schedule on back of Instruction Sheet)

9. Person to contact to accompany the Department representative during field examination of the water system.

Lynn or Dell Mitchell - 654-2434 Lynn Dell Mitchell 654-24
Name Telephone No.

Route 1 Box 38 A Declo Idaho
Address

10. The above information is my true statement of the extent to which the above numbered permit has been developed and I relinquish any undeveloped portion of the permit to the state of Idaho.

6-2-92
Date

[Signature]
Signature (and title, if on behalf of a company or organization)

JUN 25 1992

45-07688

State of Idaho
Department of Water Resources

Permit To Appropriate Water

NO. 45-07688

Proposed Priority: February 14, 1991 Maximum Diversion Rate: 1.10 CFS
This is to certify, that **LYNN MITCHELL**
DELL MITCHELL
RT 1 BOX 38B
DECLO ID 83323

has applied for a permit to appropriate water from: **GROUNDWATER**
and a permit is **APPROVED** for development of water as follows:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>RATE OF DIVERSION</u>
IRRIGATION	03/15 to 11/15	1.10 CFS

LOCATION OF POINT(S) OF DIVERSION: SENESW Sec. 1, Township 10S, Range 24E
CASSIA County

<u>PLACE OF USE:</u>	<u>IRRIGATION</u>					
<u>TWN</u>	<u>RGE</u>	<u>SEC</u>	<u>ACRES</u>	<u>ACRES</u>	<u>ACRES</u>	<u>TOTAL</u>
10S	24E	1	SENW 1	NESW 11	SWSW 9	55
			SWSE 34			
Total number of acres irrigated:						55

CONDITIONS/REMARKS:

1. Proof of construction of works and application of water to beneficial use shall be submitted on or before October 1, 1992.
2. Subject to all prior water rights.
3. A flow measurement port or other device as specified by the Department shall be installed by the right holder to provide for the installation of measuring equipment and the determination of the rate of diversion by the Department.
4. Permit holder shall comply with the drilling permit requirements of Section 42-235, Idaho Code.
5. Any license issued by IDWR pursuant to the right or portion thereof for the use of trust water is subject to a term review of 20 years after the date of this approval to determine availability of water for the use and to re-evaluate the public interest at the end of the term.
6. Diversion and use of water under this right is subject to an annual use fee if rules are subsequently promulgated which provide for the submittal of the fee.
7. The Director retains jurisdiction of this right and/or subsequent license issued to change, add or remove any requirement as determined to be appropriate.
8. The rate of diversion of water for irrigation under this right and all other water rights on the same land shall not exceed 0.02 cubic feet per second for each acre of land.

MICROFILMED

NOV 15 1991

State of Idaho
Department of Water Resources

Permit To Appropriate Water

NO. 45-07688

This permit is issued pursuant to the provisions of Section 42-204, Idaho Code.
Witness the seal and signature of the Director, affixed at Boise, this

8th day of November, 1991.

R. Keith Higginson
for R. Keith Higginson, Director

RECORDED

NOV 15 1991

RECEIVED

Form 202 14 1991
6/85

Department of Water Resources
Southern Region Office

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR PERMIT

Ident. No. 45-07688

To appropriate the public waters of the State of Idaho

Dell Mitchell #/or

1. Name of applicant Lynn Mitchell Phone 654-2451

Post office address Rt. 1, Box 38B, Declo, ID 83323

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

3. Location of point of diversion is SE $\frac{1}{4}$ of NE $\frac{1}{4}$ of SW $\frac{1}{4}$, Govt. Lot _____

Sec. 1 Township 10S Range 24E B.M. Cassia County; additional points of diversion if any: _____

4. Water will be used for the following purposes:

Amount 1.10 for Irrigation purposes from 3/15 to 11/15 (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)

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

5. Total quantity to be appropriated is (a) 1.10 and/or (b) _____
cubic feet per second acre feet per annum

6. Proposed diverting works:

a. Description of ditches, flumes, pumps, headgates, etc. Existing well & pump
with 75 H.P. turbine delivering to sprinkler system.

b. Height of storage dam _____ feet; active reservoir capacity _____ acre-feet; total reservoir capacity _____ acre-feet; period of year when water will be diverted to storage: _____ to _____ inclusive.

c. ~~Proposed~~ ^{Existing} well diameter is 16 inches; ~~proposed~~ ^{Existing} depth of well is 100 ± feet.

d. Is ground water with a temperature of greater than 90°F being sought? No

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).

NOV 15 1991

8. Description of proposed uses (if irrigation only, go to item 9):

- Hydropower; show total feet of head and proposed capacity in KW. _____
- Stockwatering; list number and kind of livestock. _____
- Municipal; show name of municipality. _____
- Domestic; show number of households. _____
- Other; describe fully. _____

9. 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 the use (example: *D* for Domestic) in the corresponding place of use below. See instructions for standard symbols.

TWP	RANGE	SEC.	NE¼				NW¼				SW¼				SE¼				TOTALS
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	
10S	24E	1								*			9	8			34		55
										*									

* Changed per telecon w/Dell Mitchell 2-19-91
 Changed to correspond to license extm
 for 45-7454

Total number of acres to be irrigated 55

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

None

11. a. Who owns the property at the point of diversion?

Applicant

b. Who owns the land to be irrigated or place of use?

Applicant

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

12. Remarks:

The use of this well for irrigation of these lands was established in 1978 when the well was developed under permit 45-07454. Adjudication claim A45-11971 has been filed in conjunction with this application to cover this use.

RECEIVED

NOV 15 1991

13. 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.

Don A. Stutts
(Applicant)

Received by ADm Date 2/14/91 Time 4:53 P.M. Preliminary check by J. Stanton
Fee \$ 65⁰⁰ Receipted by ADm # 5013019 Date 2/19/91
Publication prepared by M. Baldwin Date 4-17-91 Published in S.O. Press
Publication approved M. Baldwin Date 5-16-91

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. _____, and said application is hereby _____.

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 _____, 19 ____.
- 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. The water right acquired under this permit if for hydropower purposes shall be junior and subordinate to all rights to the use of water, other than hydropower, within the State of Idaho that are initiated later in time than the priority of this permit and shall not give rise to any right or claim against any future rights to the use of water, other than hydropower, within the State of Idaho initiated later in time than the priority of this permit.
- e. Other:

RECEIVED

NOV 15 1991



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

July 29, 1994

LYNN MITCHELL
DELL MITCHELL
RT 1 BOX 38B
DECLO ID 83323

RE: WATER RIGHT NO. 45-07688

Dear Water Right Holder(s):

Enclosed herewith is a copy of the Water Right License issued on the above referenced permit. If you have any questions, please contact me within 10 days of receipt of this license.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jim Johnson', with a long horizontal line extending to the right.

JIM JOHNSON, Manager
Water Right Permits Section

JJ:dc

Enclosure

MISSOURY

AUG 15 1994

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

RECEIVED
DEC 15 1993
Department of Water Resources

A. GENERAL INFORMATION

Permit No. 45-7688

1. Owner: Dell / Lynn Mitchell

Phone No. 654-2457

Current Address: Rt. 1 Box 388 Declo

83323

2. Accompanied by: Dell Mitchell

EXAM DATE: 8-7-92 / 9-18-92

Address: _____

Phone No. _____

Relationship to Permit Holder: _____

3. Source: Groundwater

tributary to _____

B. OVERLAP REVIEW

1. Other water rights with the same place of use: _____

2. Other water rights with the same point of diversion: 45-7454

C. DIVERSION AND DELIVERY SYSTEM

1. Point(s) of Diversion:

Ident No.	Gov't Lot	¼	¼	¼	Sec.	Twp.	Rge.	County	Method of Determination/Remarks
		SE	NE	SW	1	10S	24E	Cassia	Aerial Photo, Inspection

2. Place(s) of Use:

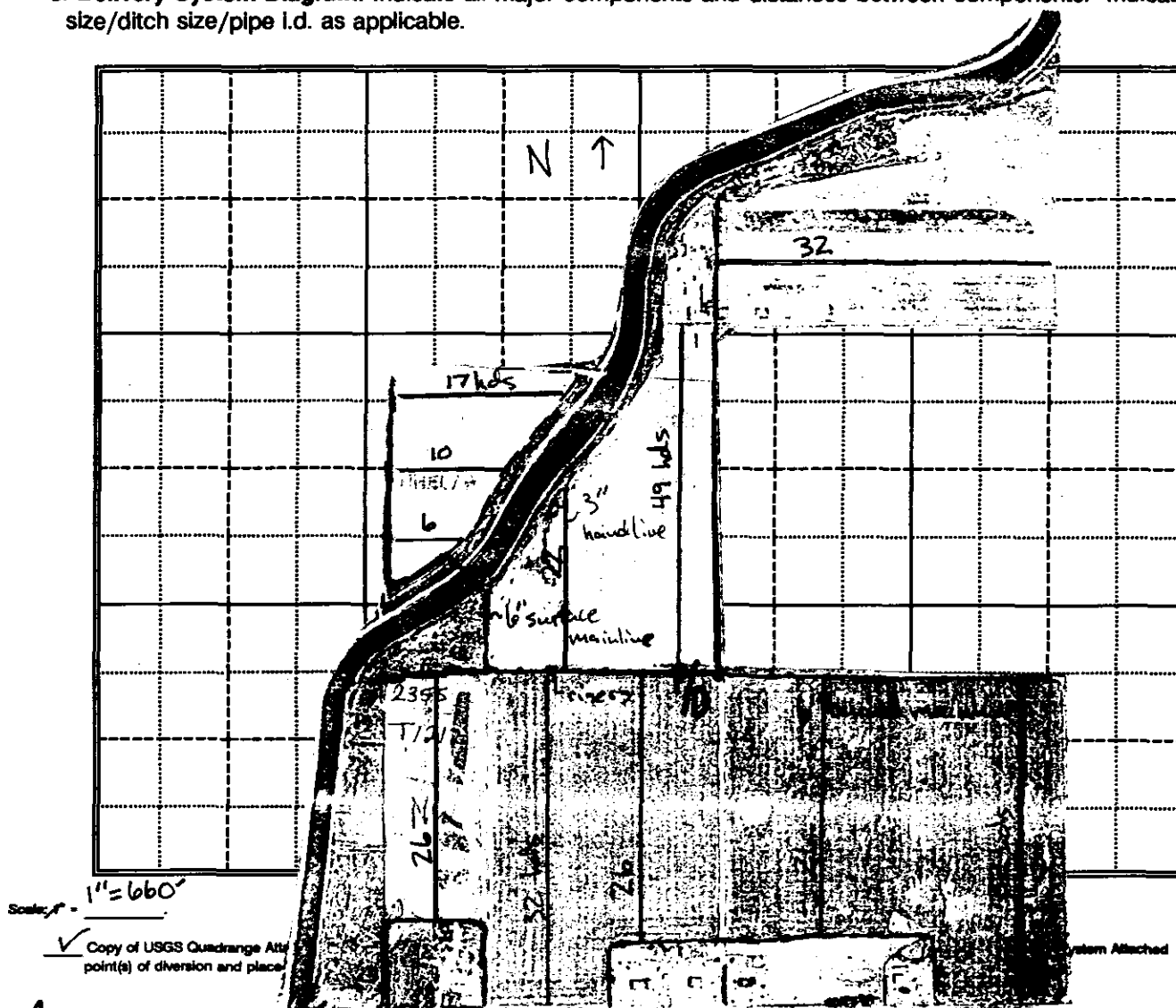
Indicate Method of Determination Planimeter (Aerial Map)

TWP	RGE	SEC	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
10S	24E	1									11		7				34		52

RECEIVED

AUG 15 1994

3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe i.d. as applicable.



4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
	A.O. Smith	60	IE61	Floway	62-2690

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
Polysonic	TyneFlyte	Polysonics	TF-P	N7HS806		
Pitot tube ² psi gauge						

2. Measurements: With the polysonic on 9-18-92, the average flow rate of 1270 gpm or 2.83 cfs was calculated. During this measurement, I found the system ~~was not~~ not watering beneficially. (see Remarks)

AUG 15 1994

E. NARRATIVE/REMARKS/COMMENTS

This permit overlaps P/D with L45-7454. During the first visit with Dell Mitchell on 8-7-92, I went over the P/D, P/O, & his normal operations. I attempted to take a measurement but some of his handlines weren't set up due to the harvest. We concluded I would come back when he had his handlines set up again.

I came back on 9-18-92 & took a polysonic reading of 2270 gpm or 2.83 cfs. I found out that Mr. Mitchell had 3 more handlines & about 70 more heads operating than the last time I visited. The sprinklers were turning but the pressure (about 20 psi) was very poor. ~~I~~ ^{felt he} could not beneficially irrigate 130 acres this way. He said that this wasn't his normal operations & only wanted to get as much water as possible. Therefore, I did not recommend this diversion rate as his system capacity.

In June of 1988, L45-7454 had a field exam conducted on this same system. An annubar reading of 2.3 cfs & sprinkler method of 2.0 cfs was calculated. I felt this ^{reading was} more accurate measurements for beneficial use.

Mr. Mitchell on the first visit told me he operates about 285 lbs (see system diagram) normally. These heads are $\frac{9}{16}$ " (most). I figure he needs about 50 psi to normally run these heads at the well head. A theoretical diversion rate of 2.04 cfs was calculated with 50 psi at the well head. I also estimated if 50 psi was at the well head the avg. pressure at the sprinklers would be 30 psi. A sprinkler method is calculated to be 2.08 cfs. Therefore, I will recommend 2.04 cfs for the current rate. See the overlap analysis for complete calculations.

Mr. Wells of Rott River Electric conducted a test in June of 1992 to test the effectiveness of a retrofit. The water level was 60' & pumping level was 66'. I used these values in my theoretical diversion rate. Unfortunately, this test wasn't designed to find the system capacity.

See system diagram for design of operation.

Have conditions of permit approval been met? ☒ yes ☐ no

AUG 15 1994

OVERLAP REVIEW ANALYSIS

PERMIT NO: 45-7688
NAME: DELL/LYNN MITCHELL
POINT OF DIVERSION: SENESW, SEC. 1, 10S, 24E
PLACE OF USE: SENW(1 acre), NESW(11 acres), SWSW(09 acres), &
SWSE(34 acres) SEC. 1, 10S, 24E
PERMIT RATE: 1.10 cfs

OVERLAP

LICENSE 45-7454
POINT OF DIVERSION: SENESW, SEC. 1, 10S, 24E
PLACE OF USE: SWNE(27 acres), SENW(3 acres), NESW(22 acres), &
SESW(38 acres) of SEC. 1, 10S, 24E
RECOMMENDED RATE: 1.8 cfs

RESULTS OF EXAMINATION

POINT OF DIVERSION: SENESW, SEC. 1, 10S, 24E
PLACE OF USE: SWNE(25 acres), SENW(3 acres), NESW(28
acres), SWSW(7 acres), SESW(33 acres), & SWSE(34 acres) of SEC. 1,
10S, 24E
THEORETICAL RATE: 2.04 cfs
MEASURED RATE: 2.83 cfs (more handlines & heads were put in for
this measurement) (I recommend that the diverting water wasn't all
beneficially used when operating in this manner.)
MEASURED RATE IN JUNE OF 1988 ON SYSTEM: 2.3 cfs (annubar),
2.0 (sprinkler)
*** see remarks section for further explanation

CALCULATIONS

CURRENT RATE PER ACRE: $2.04 \text{ cfs} / 130 \text{ acres} = .01569 \text{ cfs/acre}$
OLD RATE PER ACRE: $1.8 \text{ cfs} / 90 \text{ acres} = .02 \text{ cfs/acre}$
DIFFERENCE: $-.0043 \text{ cfs/acre}$

FLOW RATE FOR NEW ACRES = $52 \text{ acres} * .01569 \text{ cfs/acre} = .82 \text{ cfs}$
TOTAL FLOW RATE RECOMMENDED FOR THIS PERMIT = .82 cfs
TOTAL LICENSED FLOW RATE AFTER RECOMMENDED IS GRANTED = 2.62 cfs

CONDITIONS

The maximum combined rate of diversion under this permit and L45-7454 shall not exceed 2.04 cfs.

APPROVED
AUG 15 1994

238.2
T8555

3
12.8

19.3

HEL

13.4

HEL

34.9

HEL

2470
T1208

Aerial Photo
for #45-7688
Overlap P/D with L45-7454

PERMIT 45-7688 INIT B.P.B.
T. R. S. Q/Q
P/D 10S 24E 1 SEWESW
SCALE 1" = 660'
PHOTO ID.

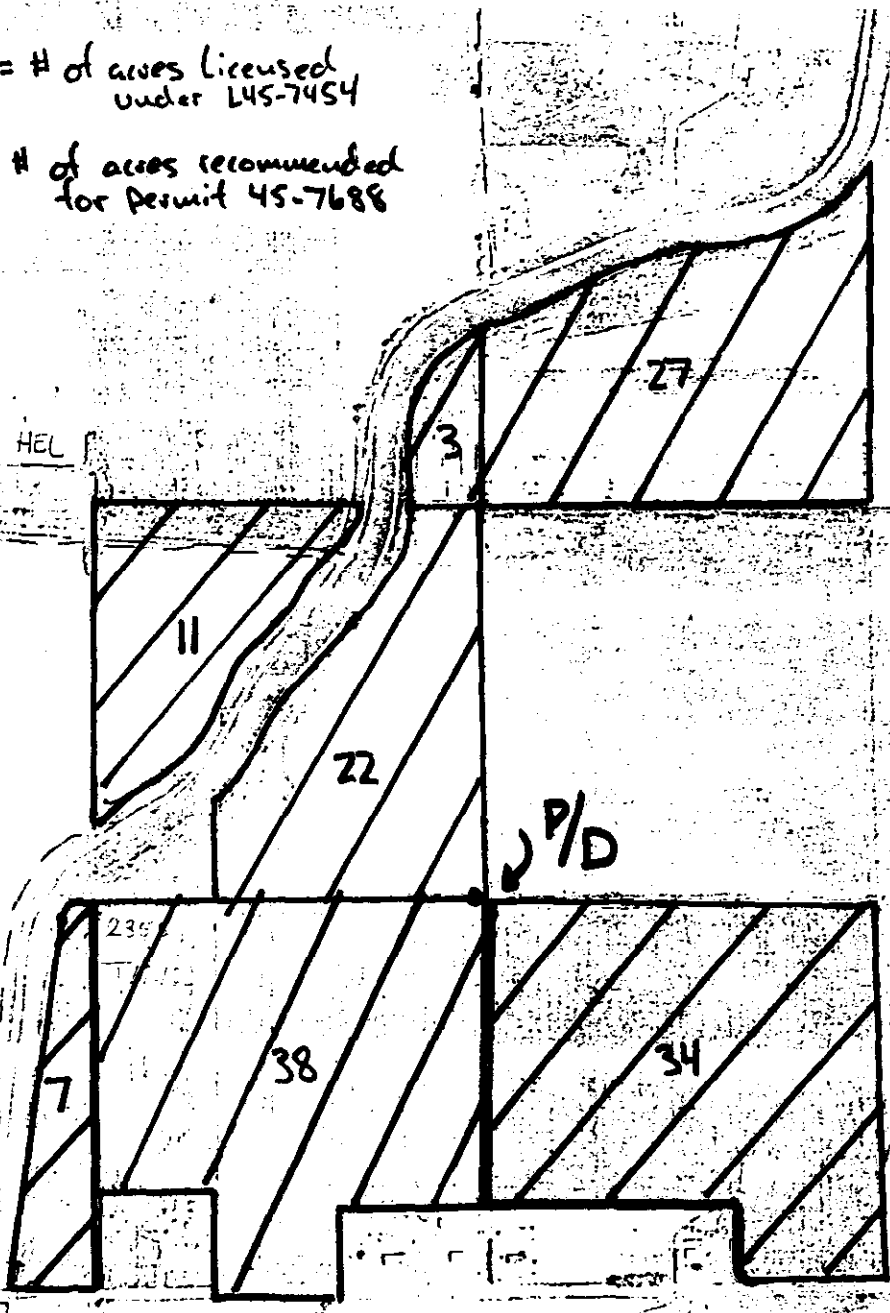
[N] = # of acres licensed
under L45-7454

[N] = # of acres recommended
for Permit 45-7688

138.9

HEL

235.2
T11.1



60.0 HEL

RECEIVED
AUG 15 1994

Acceage Analysis for #45-7688

NUMBER	TNS	RNG	SEC	NE				NW				SW				SE				TOTAL	SYSTEM TOTAL
				NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE		
L 45-7454			1			27				3	22			38						90	
Permit 45-7688			1							1	11			9				34		55	
rain-fount (Assump)			1			25				3	28			7	33			34		130	
Per. for Permit 45-7688			1							0	11			7				34		52	

see explanation in remarks section

NUMBER	TNS	RNG	SEC	NE				NW				SW				SE				TOTAL	SYSTEM TOTAL
				NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE		

NUMBER	TNS	RNG	SEC	NE				NW				SW				SE				TOTAL	SYSTEM TOTAL
				NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE		

NUMBER	TNS	RNG	SEC	NE				NW				SW				SE				TOTAL	SYSTEM TOTAL
				NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE		

APR 15 1994
AUG 15 1994

[illegible]

III- P/O for
45-7688
II- P/O for
L 45-7454

AUG 15 1994



#45-7688

→ P/C photo taken from well
looking southeast

→ P/C photo taken from well
looking south ↓





#45-7688

→ P/D

→ P/U

← look polygenic there



Form 219
6/86

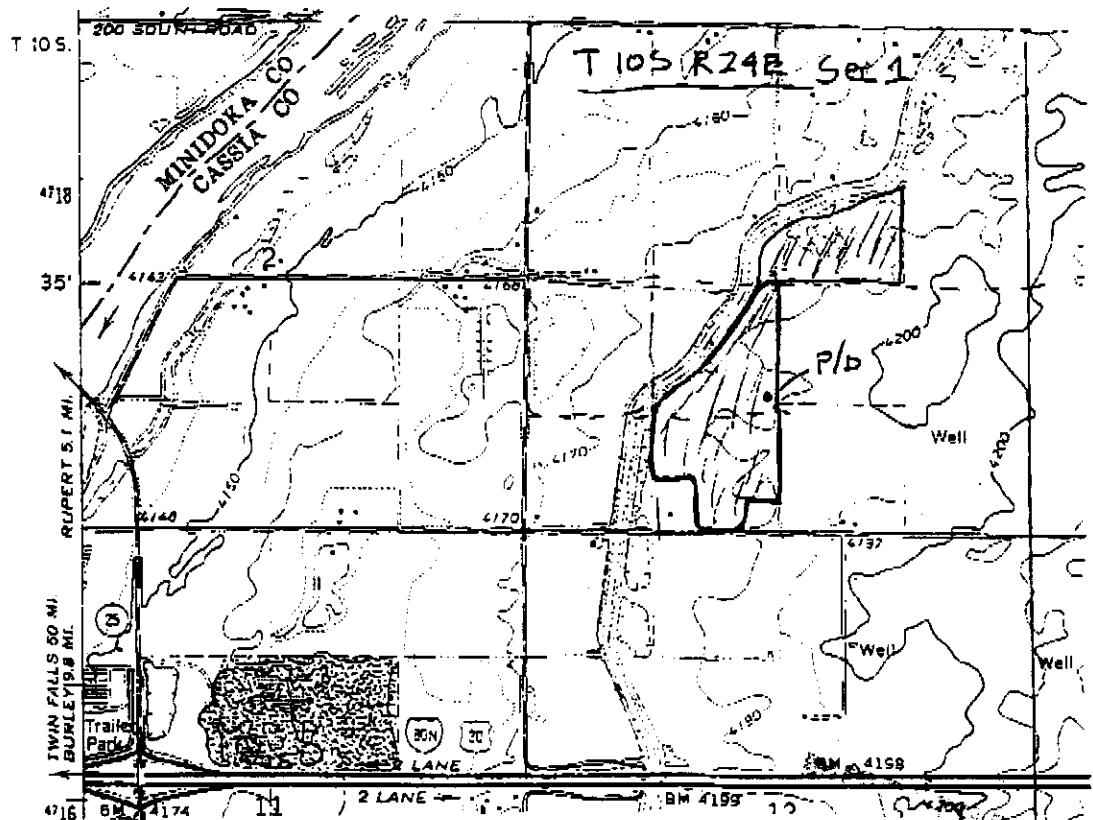
Licensed 10-16-92
 STATE OF IDAHO
 DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

DEC 9 6 1991

Department of Water Resources

A. GENERAL INFORMATIONPermit No. 45-74541. Owner: Dell N. &/or Lynn MitchellPhone No. (654)-2451Current Address: Rt. #1 Box 39A, Delco, Id. 833232. Accompanied by: Lynn MitchellEXAM. DATE: 6/10/88Address: samePhone No. sameRelationship to Permit Holder: owner3. Source: Groundwater tributary to N/A**B. OVERLAP REVIEW**1. Other water rights with same place of use: 45-7583, 45-7533☐ Copies Attached2. Other water rights with same point of diversion: 45-7583☒ Copies Attached☐ Copies of Field Exam's Attached**C. SYSTEM DESCRIPTION**

1. **Diversion System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe i.d. as applicable. ☐ Alternative diagram attached



Scale: 1" =

2. ☒ Copy of U.S.G.S. Quadrangle Attached
 Showing location(s) of point(s) of diversion and place(s) of use (required).

- ☒ Aerial Photo Attached
 (required for irrigation of 10 acres or more)

- ☒ Photo of Diversion and System Attached
 (required for all but single household domestic groundwater, and stockwater.)

1994

Do not use this space

D. FLOW MEASUREMENTS

☐ Additional Data Sheets Attached

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
Annubar				091400	6.065	

2. Measurements:

With the annubar & manometer I measured a $\Delta H = 51.5$ or $Q = 2.3$ cfs.
 At a pressure of 48 psi. Pito tube measurement of $P_{ave} = 35$ psi & 187
 nozzles gives $Q \approx 2$ cfs.

E. FLOW CALCULATIONS

☒ Additional Computation Sheets Attached1. Measured Method: $Q = 2.3$ cfs by use of Annubar.

2. Alternate Method for Checking Purposes:

Pito tube : average Pressure = 34 psi, 187 heads type 30-CP $Q = 4.80$ gpm / nozzle

 $Q = 2.0$ cfs

F. PUMP EFFICIENCY DATA (Optional)

Discharge Pressure: 48 psi x 2.31 = 111 ft (1); Dynamic pumping level: _____ ft (2)

Total Head: (1) + (2) = _____ (3); Flow rate: _____ cfs (4)

Water HP: (3) x (4) ÷ 8.8 = _____ (5)

Meter Input KW: 3.6 x 57.6 KH x _____ CTR or 10 MULT x _____ PTR x 5 N/ 22 T = 471.3 (6)

Meter Input HP: (6) x 1.34 = 632 (7)

Panel Input KW: _____ Ave PF x _____ Ave Volts x _____ Ave Amps x .001732 = _____ (8)

Panel Input HP: (6) x 1.34 = _____ (7) Efficiency: (5)/(7) x 100 = _____ %

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

 $V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 90 \text{ ac.} \times 4.0 \text{ Acre ft/acre/season} = 360 \text{ Afa}$ $V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 = 2.3 \text{ cfs} \times 245 \text{ days} \times 1.9835 = 1118$ $V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 360 \text{ Afa}$

2. Volume Calculations for Other Uses:

AUG 15 1994

System Description (continued)

3. Narrative: Description (As operating at time of measurement. Indicate pressure, number of sprinklers, etc.)

An 18" dia. well and 60 HP turbine Pump supply 6 lines with 187 Rainbird 9/64" 30-CP nozzles. Pressure at pump was 48 psi with average pressure at the nozzles of 35 psi. Depth to water could not be measured. One M-scope has been lost, and I could not get the probe past 40 ft without getting hung up.

☐ See Remarks on page 4 for continuation

4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
well	A.O Smith	60	1EG1	Floway	62-2690

*Code to correspond with No. on map and aerial photo

5. Point(s) of Diversion:

Ident. No.	Gov't. Lot	1/4	1/4	1/4	Sec.	Twp.	Rge.	County	Method of Determination/Remarks
		SE	NE	SW	1	10S	24E	Cassia	Aerial photo

6. Place(s) of Use:

Indicate Method of Determination Aerial photo

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	
10S	24E	1			27					3	22			38					90

AUG 15 1994

H. REMARKS AND OVERLAP REVIEW ANALYSIS

Recommend Licensing for 1.8 cfs CR3177 this right when combined with
all other rights (95-7593) shall provide no more than .03 cfs per
acre nor more than 4.0 cfs per acre for the lands above.

I. RECOMMENDATIONS**1. Recommended Amounts**

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
<u>Irrigation</u>	<u>March 15</u>	<u>Nov. 15</u>	<u>1.8</u>	<u>360</u>
Totals:			<u>1.8</u>	<u>360</u>

2. 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**J. AUTHENTICATION**

Field Examiner's Name

Carl Reeb

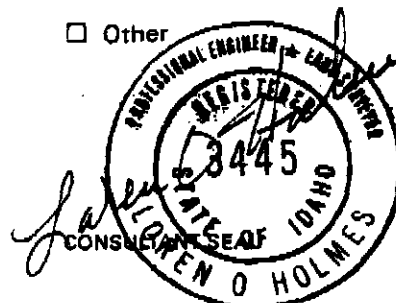
Signature

Carl S. Reeb

Certification Date

4/10/91

Field Report Preparation Date

6/10/88

K. Licensing recommendation shall be prepared by an Idaho Department of Water Resources employee on a computer printout attached hereto.

RECEIVED
AUG 15 1994

Form 219-Supp.
7/87

State of Idaho
DEPARTMENT OF WATER RESOURCES
SUPPLEMENTAL FIELD REPORT FOR ANNUBAR MEASUREMENT

Measured by: Carl Reeb Date 6/10/94
Owner: Dell N. &/or Lynn Mitchell Permit No. 4S-7454

Description of well &/or measuring site

- Include any clarifications of the sketch
- Include legal description if more than one p.d. is described in the Field Report

Pressure at time of measure was 48 psi. Depth to water could not be obtained, one probe was lost by Brian K. last year and probe would not go past 40 ft on a second try.

MEASURED INSIDE PIPE DIAMETER IN INCHES (ID)

CIR = Pipe Circumference in Inches = 21
T = Pipe Thickness in Inches = .25
ID = 2 [(0.1592 X CIR) - T] = ... 6.2

ANNUBAR DESCRIPTION & CONSTANT (C)

Size Used in Test 6.065

State ID No. _____

Select C based on size from Table below.

Nominal Pipe Size	C
4"	4.23
6"	3.75
8"	3.87
10"	3.94
12"	3.99
14" - 16"	4.01
18" - 24"	4.02
30" or larger	4.03

C selected 3.75DIFFERENTIAL PRESSURE READING IN INCHES OF H₂O (H)High Reading = 53.1Low Reading = 1.6High - Low = H = ... 51.5

CALCULATION OF DISCHARGE IN CFS (Q)

$$Q = \frac{(ID)^2 \cdot (\sqrt{H}) \cdot (C)}{448.8}$$

$$Q = \frac{(6.2)^2 \cdot (\sqrt{51.5}) \cdot (3.75)}{448.8} = 2.3 \text{ cfs}$$

SKETCH (If not shown on Field Report)

RECEIVED

AUG 15 1994

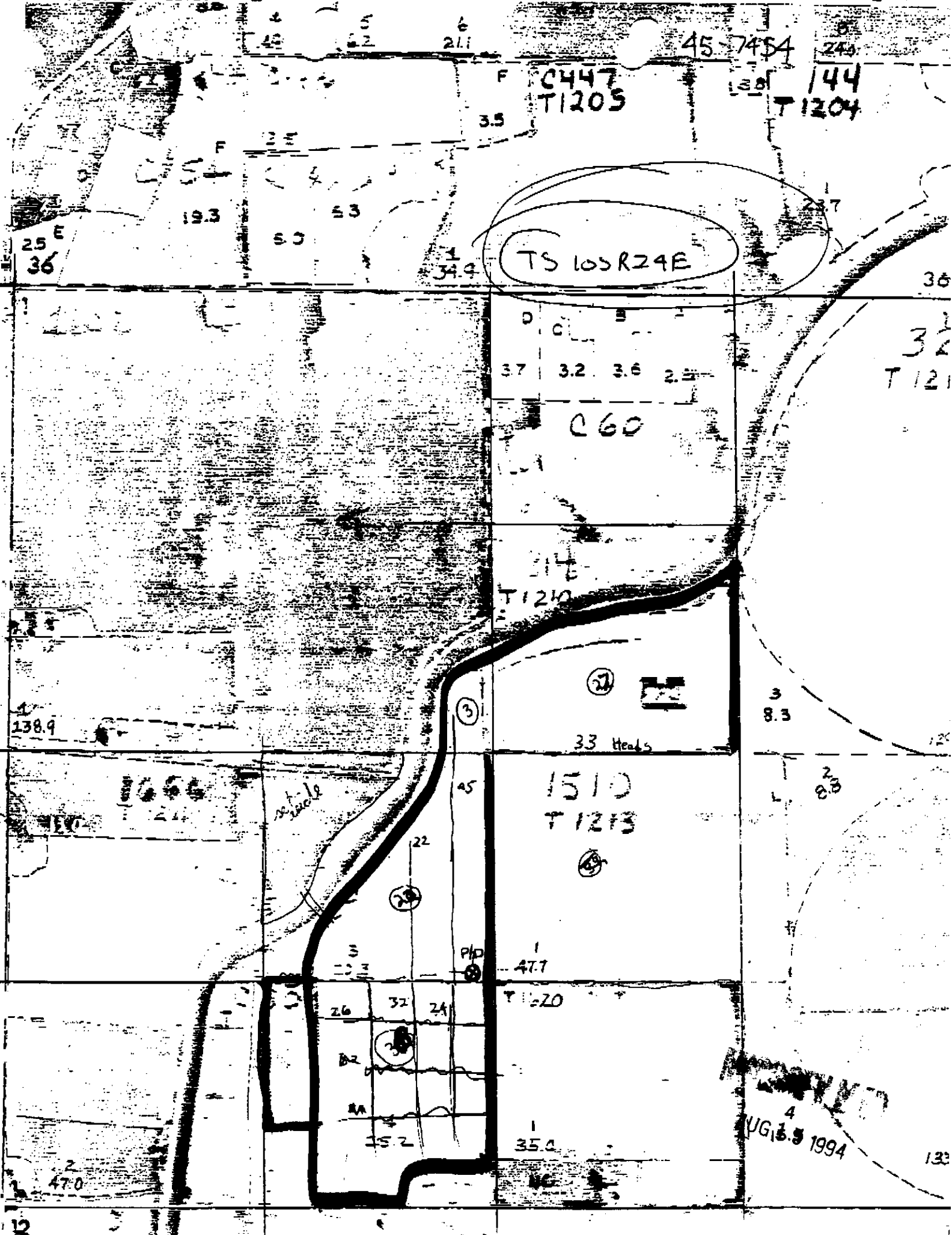
08/17/92

11:18

1 208 327 7866

ID WATER RESOLURS →→→ SOUTHERN

4007



Sept 22, 1987

Memo to file # 45-7454

On July 16, 1987 the first visit to do the field exam was made. The manometer tube got broken, so no exam was done. Two additional times were tried by Darren K., but each time the small manometer would not give a reading. The columns of water would just go up and out of sight on the manometer. On Sept 21, 1987 Jerry B. accompanied Darren K. to see if the problem could be determined. The 57" manometer was used. Even with the longer manometer they could not get a reading. The velocity head was higher than could be read with the long manometer. The owner Dale Mitchell said the pressure that was in the system (20-30 psi) was much too low. A couple of blow outs were found and repaired. Then a reading was taken with success, but a very poor representation of the normal system. So the field exam will be completed in the spring of '88.

Darren Krueger
1994

SNAKE RIVER CONSULTING

1-208-733-7352

Robin D. Wells, P.E.
3219 E. 3600 N.
Kimberly, Idaho 83341

P.O. Box 1763
Twin Falls, Idaho 83303

Date: August 13, 1992
To: Bret Barry
IDWR, TWIN FALLS 208-3033 fax 208-3037
From: Robin D. Wells, at Raft River Electric 645-2211
Subject: Test Results for Del Mitchell, Home Farm Pump

Bret,

Attached you should find page 1 of a report on the Del Mitchell System at Declo. I did this test to measure the effectiveness of a retrofit done in 1990.

I had suggested to Del that he change the design of the bowls which would have given him the capacity that he needed to run additional hand lines without significant increases in pressure; instead he reconditioned the existing bowls and see the efficiency of the post test results.

Sincerely,


Robin D. Wells, P.E.

RECEIVED

AUG 15 1994

PT12392.2-rdw

POST PUMP TEST FORM

ver 06/15/92

Bonneville Power Administration

Page PT1A

South Side Electric Lines

-Irrigator Name: Del Mitchell

Inspection #.: SSE033pt

-Analysis Date.: 06/15/92

Inspection Date: 07/23/91

-Irrig Acres.: 107 State > 10

Old Inspection #: SSE027

A. # of Pumps in System 1

Pump # 1

MAIN Well BOOSTER SERIES PARALLEL

---(See other pumps as indicated.)---

B. NAMEPLATE MOTOR DATA

C. PUMP AND WATER SUPPLY DATA

1. Make.....: A.O. Smith
 2. Frame #.....: 365UF
 3. Rated HP....: 60
 4. Rated Volts.: 440
 5. Rated Amps.: 77.5
 6. RPM.....: 1775
 7. Meter #.....: 81391861
 8. U/T Frame?: 0

1. Make.....: Floway Head
 a Centrifugal:
 b Turbine-Sub: Floway
 2. Model #.....: 14"
 3. Hd./Serial #: 62-2690
 4. Rated Head.. ? ft.
 5. Rated Flow.: ? gpm

D. ELECTRICAL POWER INPUT DATA

(One motor)

1. Disc Revolutions....: 10.0 rev
 2. Meter Constant Kh...: 57.5 w.sec/r
 3. CTR.....: 1.0 X
 4. PIR/Multiplier.....: 1.0 X
 5. Time.....: 41.95 sec
 kW Metered: 47.4 kWe (Utility Meter)

6. Implr Dia...: full ?
 7. Intake Dia...: 10 in.
 8. Column Len.: 70 ft.
 9. # of Stages: 3
 10. Col.Tub.Sft: 10x2.0x1+3/16
 11. Well Depth.: 82 ft.
 12. Casing Dia.: 18 in.
 13. Disch.Dia...: 10 in.
 14. Records....: Lync, IF

<FORCE?: Yes

1-2 1-3 2-3 Average
 6. Line Voltage.....: 476.0 478.0 476.0 LV AVE.= 476.7 Volts
 7. Amperage.....: 73.5 72.0 74.0 LA AVE.= 73.2 Amps
 8. Power Factor..(%)...: 79.0 80.0 79.0 PF AVE.= 79.3 % Lag
 kW Measured: 47.9 kWe (Pump Panel)

COMMENTS

E. MEASURED FLOW AND PRESSURE DATA

1. Measurement Device: Hollins 2 psi
 2. Pipe Inside Diam...: 6.25 in.
 3. Average Velocity...: 7.88 fps
 4. Flow Reading.....: 753 gpm
 5. Discharge Pressure.: 12.0 psi

Average Supply Voltage .. OK
 Motor Current Within Rating
 Voltage Balance in Tolerance
 Current Balance in Tolerance
 Power Factor Balance is . OK
 Power Factor Level is ... OK
 Est. Full Load Motor Eff 89.6%
 Est. Pump (w/o motor) Eff 68.7%
 Est. of Full BHP Load is 98.9%

F. WATER LEVEL AND FRICTION LOSSES

NOTES

1. Pumping Lift.....: 66.0
 2. Suction Head.....: ft.
 3. Static Water.....: 60.0 ft.
 4. Water Level Fluct...: ft.
 5. Misc Frict Losses...: 1.5 ft.

> 30 MI = One CFS, in ID
 > (Motor Shaft OUTPUT is SHP) <
 > (Pump Shaft INPUT is BHP) <
 > (Pump Water OUTPUT is WHP) <
 > (Pump Eff. is Est. Curve Eff) <
 > (Motor Load = System Load) <
 Reconditioned pump and motor.
 New strainer.
 Located on D. Mitchell farm DEB 10.

G. TESTED PUMPING PLANT CONDITIONS

1. Total Dynamic Head.: 210.8 ft.
 2. Flow... MI= 84 753 gpm
 3. Water Horsepower....: 40.1 WHP
 4. Input Horsepower....: 66.3 IHP
 5. Est. Motor Brake HP.: 59.3 SHP
 6. Pumping Plant Eff...: 60.5 %

Does Mtr kW = Tot. Load? Yes
 Total Sys. BHP Demand = 66.3
 CUF (Sft. Load = BHP) = 58.4
 Est. Total SHP HP Loss = 0.96

Aug 15 1994
 DEB 10

June 12, 1992

LYNN MITCHELL
DELL MITCHELL
RT 1 BOX 38B
DECLO ID 83323

PROOF ACKNOWLEDGMENT LETTER

RE: PERMIT NO. 45-07688

Dear Permit Holder:

The department acknowledges receipt of the proof of beneficial use form submitted for the above referenced permit. The next step in the process of developing a water right is for the department to conduct a field examination to determine and confirm the use being made of the water.

If you have questions concerning this matter, please feel free to contact the SOUTHERN Regional Office in Twin Falls at (208)736-3033.

Sincerely,

Karen L. Gustafson
Secretary/Records Manager

c: IDWR - Region

RECEIVED
JUN 25 1992



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

November 14, 1991

LYNN MITCHELL
DELL MITCHELL
RT 1 BOX 38B
DECLO ID 83323

PERMIT APPROVAL NOTICE

RE: PERMIT NO. 45-07688

Dear Permit Holder:

Enclosed is a copy of your approved application for permit. We direct your attention to the conditions of approval on the final page.

Enclosed is a form entitled "Instructions for Proof of Beneficial Use". Please read the instructions carefully since you must take further action to develop this permit. Also enclosed is a form entitled "Proof of Beneficial Use". If your project is already completed you should complete and submit this form immediately.

Be sure to note the special condition requiring you to install a measuring device. Enclosed, for your reference, is a list of measuring device options.

Section 42-235, Idaho Code, requires that a "drilling permit" must be obtained from the department for all wells constructed after July 1, 1987. A drilling permit is a separate permit that must be issued in addition to your permit to appropriate water. Commencement of well construction or diversion of water under your permit to appropriate water is prohibited unless a drilling permit is obtained.

This permit authorizes the appropriation of trust water. Trust water is defined as that portion of a particular hydropower water right which exceeds certain minimum stream flows established by state action, and is held in trust by the State of Idaho for the use and benefit of the people within the state. Conditions

RECEIVED

NOV 15 1991

pertaining to a term review, annual use fee and jurisdiction of the permit are trust water conditions.

Sincerely,

PAMELA SKAGGS
Technical Records Specialist

PS:blm

Enclosure

NOV 15 1991

MEMORANDUM

TO: FILE

FROM: TIM LUKE

RE: APP. NO. 45-76888/Trust Water Processing

DATE: 9-25-91

The above application is a trust water filing which has been advertised by the region and forwarded to the state office for final review.

The applicants represent that the development under this application was completed prior to 1984 and also that the development is an expansion of an existing permit for which a field exam has been completed. Upon review of a 1980 infrared aerial photo, all of the land under the filing appears to be irrigated along with other lands described under permit no. 45-7454. Development therefore does appear to have been completed prior to October of 1984. Acreage under the application shall not be counted as trust acreage. Due to the priority date of the filing, all trust conditions are applicable.

UNCLASSIFIED

NOV 15 1991

SOUTH IDAHO PRESS

BURLEY, IDAHO

AFFIDAVIT OF PUBLICATION

County of Cassia, }
STATE OF IDAHO } ss.

MONIQUE JONES being first
duly sworn, deposes and says that She
is the CLERK of the South
Idaho Press, a daily newspaper published
at Burley, Idaho, in the county aforesaid
and that the paper is of general circulation
therein. Deponent further states that the
printed notice attached hereto was duly
published according to law in the regular
editions of The South Idaho Press for two
consecutive weeks, commencing with the
issue dated May 3 19 91, and
ending with the issue dated May 10,
19 91. Monique Jones

RECEIVED

MAY 16 1991

Department of Water Resources
Southern Region Office

STATE OF IDAHO
COUNTY OF CASSIA }

On this 15 day of May in the year of 1991, before me,
a Notary Public, personally appeared Monique Jones,
known or identified to me to be the person whose name subscribed to the
within instrument, and being by me first duly sworn, declared that the
statements therein are true, and acknowledged to me that he executed
the same.

Dolores M. Akey
Notary Public for Idaho

Residing at Burley ID

My commission expires: 2/4/93

Cost of Publication: 23.92
Notary Fee: .50
Total Cost: 26.42

OK
MB
5-16-91

NOV 15 1991

NOTICE OF APPLICATION FOR TRUST WATER RIGHT

45-07688

MITCHELL, DELL
MITCHELL, LYNN
RT. 1 BOX 38-B
DECLO, ID 83323

Source: GROUNDWATER

Diversion Pt: SENESW Sec 1 T 10S R 24E

Use: IRRIGATION (1.100 CFS)
Total Diversion: (1.100 CFS)

Date Filed: 2/14/ 1991

In: T10S R24E S01 SENW NESW SWSW SWSE
55.0 ACRES TOTAL

The permit(s) will be subject to all prior water rights. Protests may be submitted based on the criteria of Sec. 42-203A, Idaho Code and/or the new public interest criteria of Sec. 42-203C, Idaho Code. Protests must be filed with the Director, Dept. of Water Resources, 222 Shoshone St. East, Twin Falls, Idaho 83301 on or before MAY 20, 1991.

R. Keith Higginson, Director

Published 5/3 /1991 & 5/ 10/1991

NOV 15 1991

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
Southern Region
222 Shoshone Street East
Twin Falls, ID 83301
(208) 734-3578

APRIL 17, 1991

SOUTH IDAHO PRESS
BOX 190
BURLEY, ID 83318

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. 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 MAY 20, 1991.

Yours truly,

Mary Baldwin
Secretary/Office Coordinator

Enclosure

NOV 15 1991



ate 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

11-Apr-1991

DELL &/OR LYNN MITCHELL
RT 1 BOX 38-B
DECLO ID 83323

Re: Application for Permit No. 45-07688

Dear Applicant (s):

The Department of Water Resources acknowledges receipt of your water right application for permit. The application has been assigned the above referenced identification number. Please refer to this number in all further correspondence.

This office will be advertising the application in the South Idaho Press on 5/3 & 5/10/91. A period of ten days following the second publication will be allowed for the submittal of protests.

If the application is protested you will be sent a copy of the protest. The protest must be resolved before the application is approved or denied. If the protest is not resolved voluntarily, this Department will conduct a conference and/or hearing on the matter.

If the application is not protested, it will be forwarded to our State Office in about five weeks. State office personnel will conduct a complete review prior to final processing of the application and will notify you of the outcome of this review. When a permit is issued, you will be sent a copy. A typical processing time for an unprotested application is about eight weeks.

Please feel free to contact this office if you have any questions regarding this procedure.

Very truly yours,

James E. Stanton
Sr. Water Resource Agent

JS:MB

5 1991