

NOV - 2 2001

Permit No. 29-7417

1. Owner: Debra Lish Phone No. (208) 237-6664

Current Address: 271 Siphon Rd. Pocahontas, ID 83202

2. Accompanied by: Mike McDonald EXAM DATE: 7-11-01

Address: _____ Phone No. 637-8055

Relationship to Permit Holder: Current owner of well and 5 1/2 of the original 10 acres.

3. Source: Groundwater tributary to _____

B. OVERLAP REVIEW

1. Other water rights with the same place of use: NONE

2. Other water rights with the same point of diversion: NONE

C. DIVERSION AND DELIVERY SYSTEM

1. Point(s) of Diversion:

R071123A

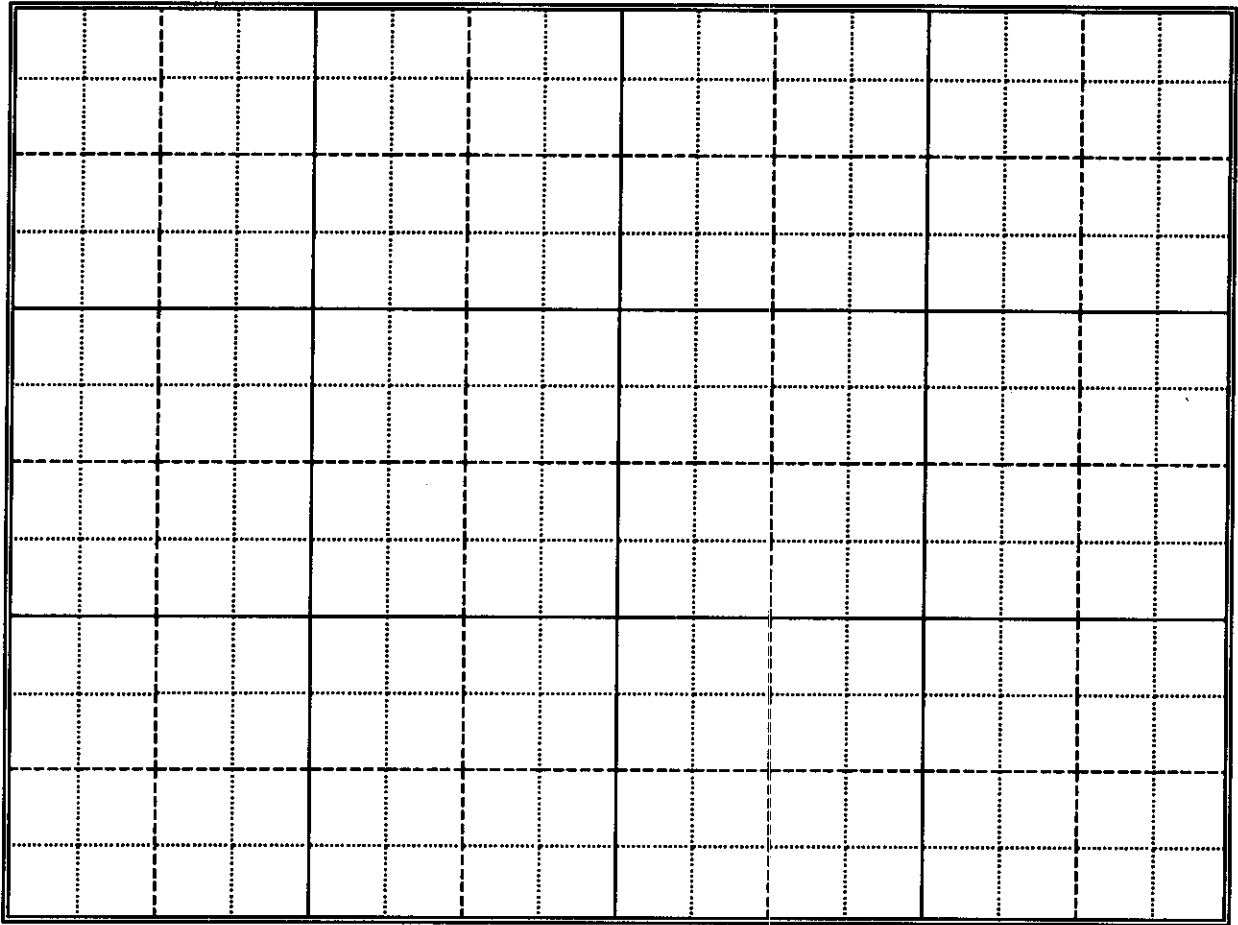
[illegible]

2. Place(s) of Use:

Indicate Method of Determination Aerial

[illegible]

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



Scale: 1" = _____

____ Copy of USGS 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)

____ Photo of Diversion and System Attached

4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
Submersible	?	5	?		

*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

2. Measurements: Pump burned up earlier this year. Theoretical will need to be used.

E. NARRATIVE/REMARKS/COMMENTS

The property is currently owned by Mike + RJ McDonald. He has the well and $5\frac{1}{2}$ of the original 10 acres. A gully separates the two parcels. 1348 Saxon Rd. Pocatello, ID 83202 is the McDonald's address.

The pump is a 5 hp - Main line is 4". ~~Two~~^{Two} lines of 14 birds^{each} is run at a time.

Independent put a culinary pump in last year. They may know depth to water.

Rainbird sizes on lines listed below.

$\frac{5}{32}$ $\frac{1}{8}$ $\frac{9}{64}$ $\frac{1}{2}$ $\frac{1}{8}$ $\frac{1}{8}$ $\frac{1}{8}$ $\frac{9}{64}$ $\frac{1}{8}$ $\frac{9}{64}$ $\frac{9}{64}$ $\frac{1}{8}$ $\frac{1}{8}$

The 5 hp motor burned up a short time back. Mr. McDonald tried to start the pump while I was there, but it tripped the breaker.

To complete this exam, we will need to do a theoretical calculation. Mr. McDonald said pressure was strong when the system was running. The birds would water out into the middle of the drive. The POV is on a hillside with the POD an estimated 30 feet higher in elevation than the lower pasture.

6 risers cross the pasture at the top of Debra Lish's property. The riding arena behind the McDonald's home is sprinkled to keep the dirt soft.

Debra Lish asked if someone would notify her of the outcome.

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

F. FLOW CALCULATIONS

✓ Additional Computation Sheets Attached

Measured Method:

$$Q_{THEORETICAL} = 0.25 cfs$$

$$Q_{LIMITED BY PERMIT} \quad Q_{IRR} = 0.20 cfs$$

$$Q_{DOM} = 0.04 cfs$$

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 10(4) = 40.0 cfs$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 = 0.2(214)1.9835 = 84.9$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 40.0 cfs$$

2. Volume Calculations for Other Uses:

$$V_{Dom} = 1.2 cfs$$

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
Domestic (un.7)	1/1	12/31	0.04 cfs	1.2 cfs
IRRIGATION	4/1	10/31	0.20 cfs	40.0
Totals:			0.24 cfs	41.2 cfs

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

I. AUTHENTICATION

Keith C Wilson 10/23/2001
 Steve Mueller

Field Examiner's Name Date 7-11-01

Reviewer Date

SEAL

$Q = \text{flow/nozzle @ 30 Psi}$

$$\begin{array}{rcl} 16 - \frac{1}{8} & = (2.56 \text{ gpm/nozzle}) & 16 = 40.96 \text{ gpm} \\ 10 - \frac{9}{64} & = (3.26 \text{ gpm/nozzle}) & 10 = 32.6 \text{ gpm} \\ 2 - \frac{5}{32} & = (4.01 \text{ gpm/nozzle}) & 2 = 8.02 \text{ gpm} \\ & & \hline & & 81.58 \text{ gpm} \end{array}$$

$$Q = 81.58 \text{ gpm} = 0.181 \text{ cfs}$$

This flow rate (0.18 cfs) is very close to the theoretical capacity

RECOMMEND $Q = 0.20 \text{ cfs}$

29-7417

THEORETICAL PUMP FLOW CALCULATIONS

Formula:

$$Q_{cfs} = [(Hp)(8.814)(Eff)] \div [Lift + (psi \times 2.308)]$$

$$Hp = \text{Horsepower} = \underline{5}$$

$$Eff = \text{Efficiency} = \underline{70\%} \quad (\text{Usually } 70\%)$$

$$\text{Lift: (Static Level + Assumed Draw down)}$$

$$\text{Static Water Level} = \underline{45} \text{ ft (well log)}$$

$$\text{Assumed Draw down} = + \underline{10} \text{ ft (ASSUMED)*}$$

$$\text{Lift} = \underline{55} *$$

OR

$$\text{Measured Dynamic Water Level} = \underline{\hspace{2cm}} \text{ ft.}$$

$$psi = \text{Operating Pressure} = \underline{30} \text{ psi} *$$

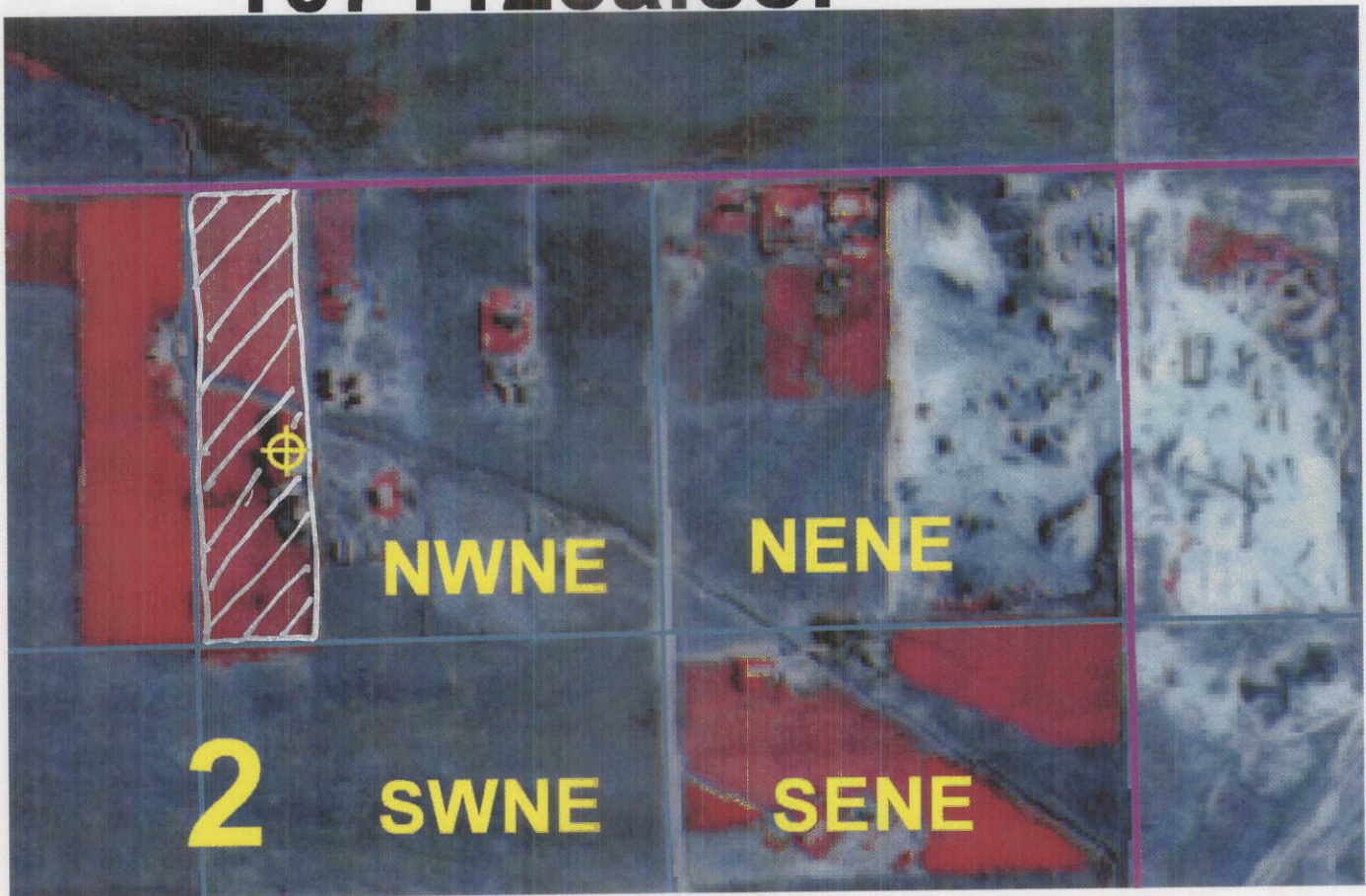
$$Q_{cfs} = \left[\frac{5}{Hp} \times 8.814 \times \frac{0.70}{Eff} \right] \div \left[\frac{55}{Lift} + \left(\frac{30}{psi} \times 2.308 \right) \right]$$

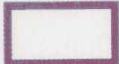
$$Q_{cfs} = \left[\underline{30.849} \right] \div \left[\underline{124.24} \right]$$

$$Q_{cfs} = \underline{0.25} \text{ cfs}$$

PERMIT NO. 29-07417

r071123a.cor



-  S06s33e.shp
-  T06s33e.shp
-  Posnpnt.shp

29-07417



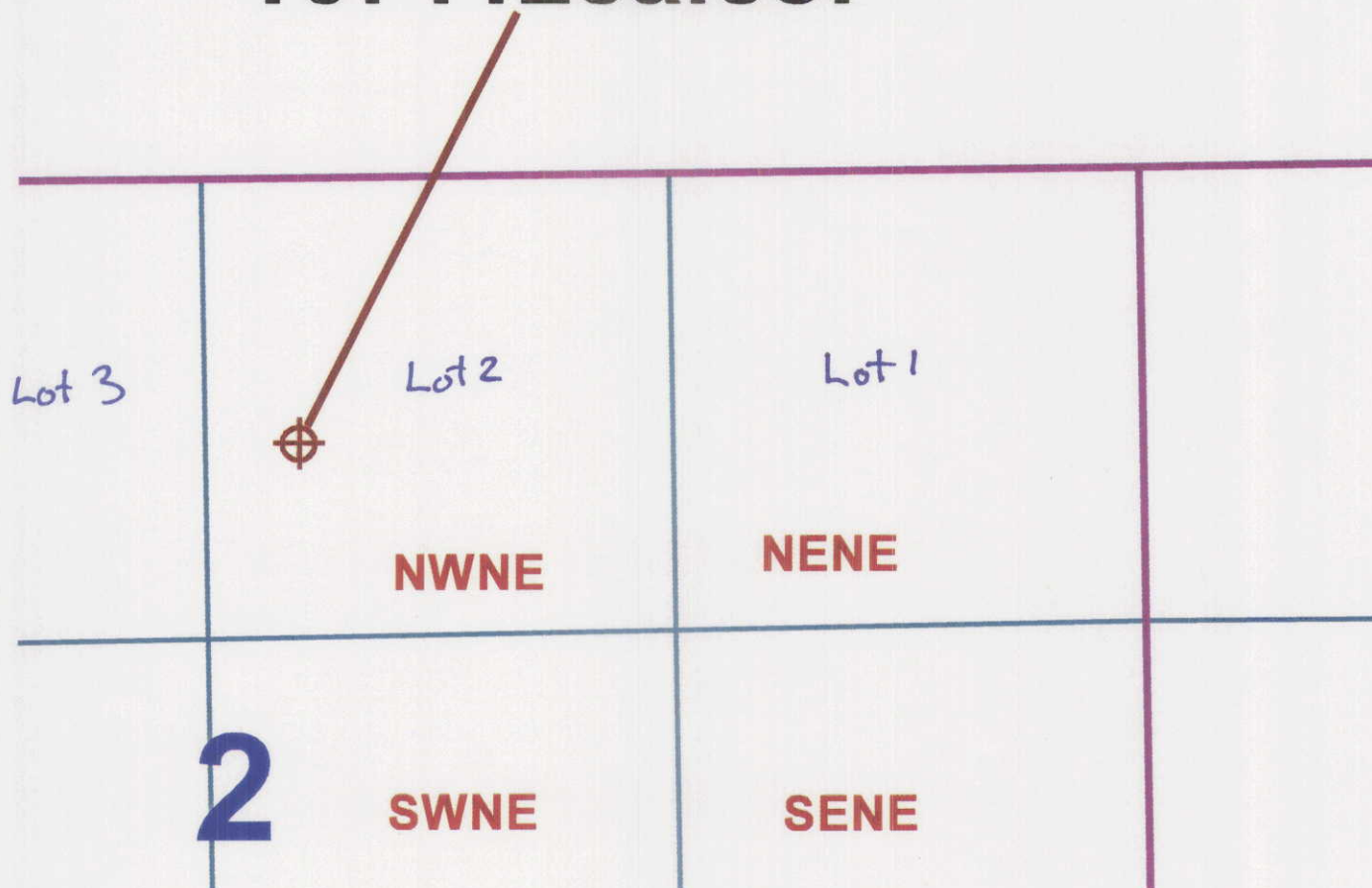
POD ✓



POD with
line leading
to lower
pasture
owned by
Debra Lish

29-7417

r071123a.cor



-  S06s33e.shp
-  T06s33e.shp
-  Posnpnt.shp

29-07417



Channel / property line separating Debra Lish's
4½ acres on the right from Mike McDonald's
5½ acres to the left.

29-7417

ervation

f the Boise Meridia

C

b

B

R33E

E

2

1

4

3

2

1

4

4007 3986 3967 3945 3923 3901 3904

80

80

80

80

3.

40.36

T
6
S

50°17'E

79.89

Sec. 2.

637.36

50°15'E

79.95

160

160

160

160

N 89°54' W

N 89°52' W

0.12

79.90

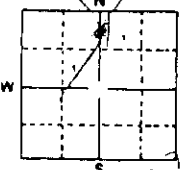
29-7417

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 10 days after the completion or abandonment of the well. Aug 19 1977

RECEIVED

Department of Water Resources
Eastern District Office

1. WELL OWNER Name <u>NEWELL, TURNER</u> Address <u>482 Park Street</u> Owner's Permit No. <u>Applied</u>		7. WATER LEVEL Static water level <u>45'</u> feet below land surface Flowing? ☐ Yes ☒ No G.P.M. flow _____ Temperature <u>51°</u> F. Quality <u>GOOD</u> Artesian closed-in pressure _____ p.s.i. Controlled by ☐ Valve ☐ Cap ☐ Plug																																											
2. NATURE OF WORK ☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (describe method of abandoning) _____		8. WELL TEST DATA ☐ Pump ☐ Bailer ☒ Other Discharge G.P.M. <u>90</u> Draw Down <u>10</u> Hours Pumped <u>2 HRS.</u>																																											
3. PROPOSED USE ☐ Domestic ☒ Irrigation ☐ Test ☐ Other (specify type) _____ ☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection		9. LITHOLOGIC LOG																																											
4. METHOD DRILLED ☐ Cable ☒ Rotary ☐ Dug ☐ Other		<table border="1"><thead><tr><th rowspan="2">Hole Diam.</th><th colspan="2">Depth</th><th rowspan="2">Material</th><th rowspan="2">Water Yes, No</th></tr><tr><th>From</th><th>To</th></tr></thead><tbody><tr><td>8"</td><td>0</td><td>14'</td><td>BOULDERS + FEA GRAVEL</td><td>X</td></tr><tr><td></td><td>14'</td><td>51'</td><td>GRAVEL</td><td>X</td></tr><tr><td></td><td>51'</td><td>87'</td><td>CLAY</td><td>X</td></tr><tr><td></td><td>87'</td><td>101'</td><td>CLAY + GRAVEL</td><td>X</td></tr><tr><td></td><td>101'</td><td>127'</td><td>BROWN CLAY</td><td>X</td></tr><tr><td></td><td>127'</td><td>153'</td><td>SAND</td><td>X</td></tr><tr><td></td><td>153'</td><td>163'</td><td>GRAVEL</td><td>X</td></tr></tbody></table>		Hole Diam.	Depth		Material	Water Yes, No	From	To	8"	0	14'	BOULDERS + FEA GRAVEL	X		14'	51'	GRAVEL	X		51'	87'	CLAY	X		87'	101'	CLAY + GRAVEL	X		101'	127'	BROWN CLAY	X		127'	153'	SAND	X		153'	163'	GRAVEL	X
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	153'	163'	GRAVEL	X																																									
5. WELL CONSTRUCTION Diameter of hole <u>8"</u> inches Total depth <u>163'</u> feet Casing schedule: ☒ Steel ☐ Concrete Thickness <u>2.50</u> inches Diameter <u>8"</u> inches From <u>18"</u> feet To <u>163'</u> feet _____ inches _____ inches _____ feet _____ feet _____ inches _____ inches _____ feet _____ feet _____ inches _____ inches _____ feet _____ feet _____ inches _____ inches _____ feet _____ feet Was casing drive shoe used? ☒ Yes ☐ No Was a packer or seal used? ☐ Yes ☒ No Perforated? ☐ Yes ☒ No How perforated? ☐ Factory ☐ Knife ☐ Torch Size of perforation _____ inches by _____ inches Number _____ From _____ To _____ _____ perforations _____ feet _____ feet _____ perforations _____ feet _____ feet _____ perforations _____ feet _____ feet Well screen installed? ☐ Yes ☒ No Manufacturer's name _____ Type _____ Model No. _____ Diameter _____ Slot size _____ Set from _____ feet to _____ feet Diameter _____ Slot size _____ Set from _____ feet to _____ feet Gravel packed? ☐ Yes ☒ No Size of gravel _____ Placed from _____ feet to _____ feet Surface seal depth <u>21'</u> Material used in seal ☐ Cement grout ☐ Pudding clay ☒ Well cuttings Sealing procedure used ☐ Sherry pit ☐ Temporary surface casing ☒ Overbore to seal depth																																													
6. LOCATION OF WELL Sketch map location must agree with written location.  Subdivision Name _____ Lot No. _____ Block No. _____ County <u>Town</u> <u>N. 1/4</u> <u>NE</u> <u>1/4</u> Sec. <u>2</u> T. <u>6</u> S. <u>33</u> E. <u>40</u>		10. Work started <u>4/12/76</u> finished <u>4/14/76</u>																																											
		11. DRILLERS CERTIFICATION Firm Name <u>Jack Chishman Drilling</u> Firm No. <u>94</u> Address <u>1415 S. 4th</u> Date <u>4/14/76</u> Signed by (Firm Official) <u>Jack Chishman</u> and (Operator) <u>Mike Sheen</u>																																											