

[illegible]

Method of Determination: Arc Map (Aerial Photo); Tax Lots.

3. ☒ Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
- ☒ Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
- ☒ Aerial Photo Attached (required for irrigation of 10+ acres).
- ☒ Photo of Diversion and System Attached

4.

<u>Well or Diversion ID No.*</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Pump Serial No. or Discharge Size</u>
A0003962	_Franklin_	_0.5_	_Unknown_	_Unknown_	_____ 1 1/4" _____
A0003963_	_Franklin_	_3_	_Unknown_	_Grundfos_	_____ 1 1/4" _____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

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

D. FLOW MEASUREMENTS

1.

<u>Measurement Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
_____ N/A _____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

2. Measurements: No field measurement. Well's discharge to pressure tanks and a water storage tank.

E. FLOW CALCULATIONS

_____ Additional Computation Sheets Attached

Measured Method: (Theoretical Horsepower Equation)

'Winter Well'

$$Q = 8.8 \times 0.7 \times 0.5/50 + (2.31 \times 30) = 3.08/119.30 = 0.03 \text{ cfs}$$

'Main Well'

$$Q = 8.8 \times 0.7 \times 10.5/380 + (2.31 \times 30) = 64.68/449.30 = 0.14 \text{ cfs}$$

$$Q(\text{theoretical}) = 0.03 \text{ cfs} + 0.14 \text{ cfs} = 0.17 \text{ cfs} > 0.04 \text{ cfs } Q(\text{permit})$$

$$HP = 0.5 \text{ ('Winter Well')}$$

$$Z = 50' \text{ (Estimated - 'Winter Well')}$$

$$HP = 3 \text{ ('Main Well')}$$

$$Z = 380' \text{ ('Main Well')}$$

$$HP = 7.5 \text{ (Booster - 'Main Well')}$$

$$P = 30 \text{ psi (Assumed)}$$

Appears that the current pumping systems from the two wells can attain the permit diversion rate of 0.04 cfs.

Recommend the permit diversion rate of 0.04 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: N/A

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

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

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

2. Volume Calculations for Other Uses: (Boy Scout Camp – 2,000 Campers)

Occupancy – Middle of June to the Middle of August ~ 60 days.

Water Usage per camper – 50 gpd

$$V_r = (2,000 \text{ campers} \times 50 \text{ gpd} \times 60 \text{ days}) / 325,850 \text{ gallon/AF} = 18.4 \text{ AFA}$$

$$V_d = (0.04 \text{ cfs} \times 60 \text{ days} \times 1.9835) = 4.8 \text{ AFA}$$

$$V_d < V_r$$

$$V = 4.8 \text{ AFA}$$

G. NARRATIVE/REMARKS/COMMENTS**WATER SUPPLY SYSTEM:**

Two ground water wells provide water for the Camp Morrison Boy Scout Camp. Between the middle of June to the middle of August, Camp Morrison accommodates approximately 2,000 campers.

The main source of water is the ground water well known as the 'Main Well'. A 3-hp submersible pump diverts water through a 1 ¼" galvanized discharge pipe to a 50,000-gallon steel water storage tank. A concrete manhole valve vault near the well, contains two control valves for bypassing the discharge to the water storage tank, and for flushing the water supply system.

A pump house, located near the 'Main Well' and the 50,000-gallon steel water storage tank, contains five (5) pressure tanks and a 7 ½-hp centrifugal booster pump.

The second well, known as the 'Winter Well', is located near the camp maintenance shop. The primary use for this well is to provide water yearround for one cabin. If needed, the 'Winter Well' can serve an additional seven (7) cabins/buildings. A ½-hp submersible pump diverts water to a pressure tank located in the maintenance shop.

OVERLAP ANALYSIS:

Point of Diversion: Water Right Permit No. 65-13297 and Water Right 65-12848 have overlapping points of diversion.

Place of Use: Water Right Permit No. 65-13297 and Water Right 65-12848 have overlapping places of use.

Have conditions of permit approval been met? ☒ Yes ☐ No

RATE &/OR STORAGE RECOMMENDED FOR LICENSING

Description	Rate of Flow (cfs)		Storage (af)
Permit Amount	0.04	&/or	N/A
Beneficial Use Limit	0.04	&/or	N/A
System Measurement	0.17(theoretical)	&/or	N/A
Proof Fee Amount	N/A	&/or	N/A
Recommended Amount	0.04	&/or	N/A

H. RECOMMENDATIONS

1. Recommended Amounts

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
DOMESTIC	1/01 to 12/31	0.040 CFS	4.8 AFA
	<u>Totals:</u>	0.040 CFS	4.8 AFA

2. Recommended Amendments

___ Change P.D. as reflected above ___ Add P.D. as reflected above X None

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

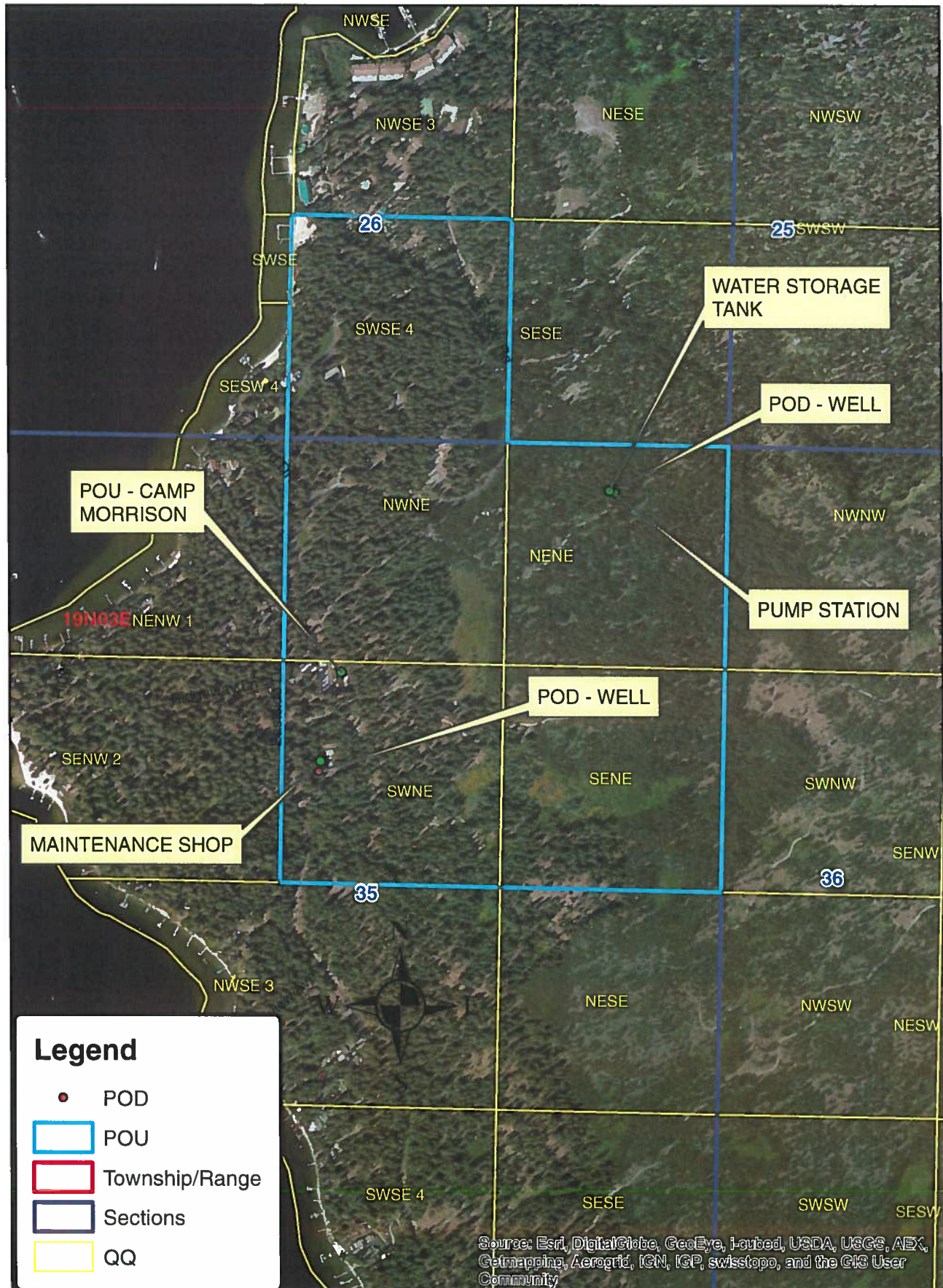
I. AUTHENTICATION

Field Examiner's Name Rick Collingwood Date 1/10/14

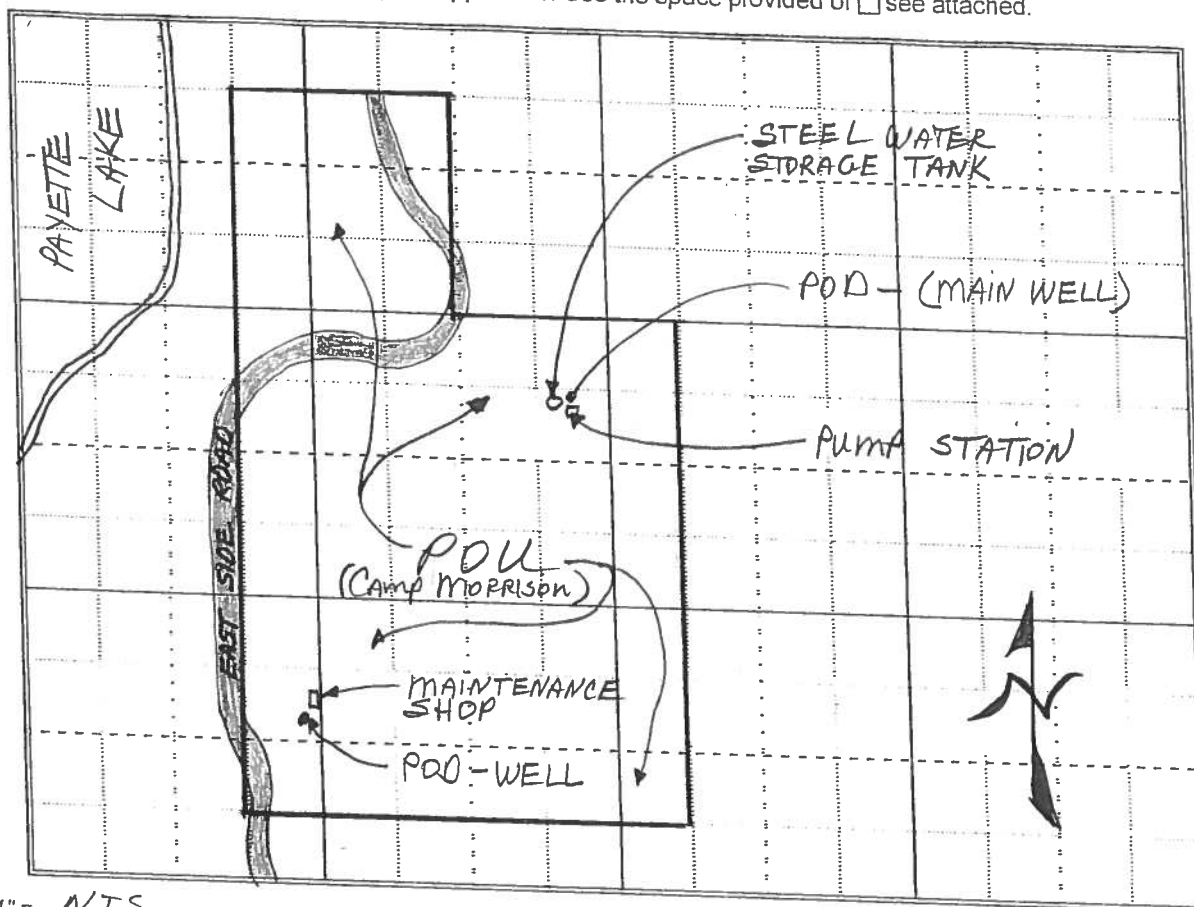
Reviewer _____ Date _____

65-13297
GOV'T. LOT 4

ESRI AERIAL PHOTO - 2012



3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe diameter (inside), as applicable. Use the space provided or ☐ see attached.



Scale: 1" = NTS

- ☐ 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

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources
within 30 days after the completion or abandonment of the well.

1. WELL OWNER Name <u>Ore-Ida Council, Boy Scouts of America</u> Address <u>110 Scout Ln. Boise, ID 83702</u> Owner's Permit No. <u>65-89-2-041</u>	7. WATER LEVEL Static water level <u>2</u> feet below land surface. Flowing? ☐ Yes ☒ No G.P.M. flow _____ Artesian closed-in pressure _____ p.s.i. Controlled by: ☐ Valve ☐ Cap ☐ Plug Temperature <u>56</u> °F. Quality <u>good</u> Describe artesian or temperature zones below.																																																																																																																																																				
2. NATURE OF WORK ☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)	8. WELL TEST DATA ☐ Pump ☐ Bailer ☒ Air ☐ Other _____ <table border="1" style="width: 100%; border-collapse: collapse;"><tr><th>Discharge G.P.M.</th><th>Pumping Level</th><th>Hours Pumped</th></tr><tr><td style="text-align: center;">30</td><td style="text-align: center;">392</td><td style="text-align: center;">2</td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></table>	Discharge G.P.M.	Pumping Level	Hours Pumped	30	392	2																																																																																																																																														
Discharge G.P.M.	Pumping Level	Hours Pumped																																																																																																																																																			
30	392	2																																																																																																																																																			
3. PROPOSED USE ☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection ☐ Other _____ (specify type)	9. LITHOLOGIC LOG <table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th rowspan="2">Bore Diam.</th><th colspan="2">Depth</th><th rowspan="2">Material</th><th colspan="2">Water</th></tr><tr><th>From</th><th>To</th><th>Yes</th><th>No</th></tr></thead><tbody><tr><td>10</td><td>0</td><td>1</td><td>Top Soil</td><td></td><td>X</td></tr><tr><td>10</td><td>1</td><td>9</td><td>BROWN SANDY CLAY + Boulders</td><td></td><td>X</td></tr><tr><td>10</td><td>9</td><td>19</td><td>BROWN CEMENTED SAND + GRAVEL</td><td></td><td>X</td></tr><tr><td>8</td><td>19</td><td>32</td><td>BROWN CEMENTED SAND + GRAVEL</td><td></td><td>X</td></tr><tr><td>8</td><td>32</td><td>48</td><td>GRANITE Boulders</td><td></td><td>X</td></tr><tr><td>8</td><td>48</td><td>60</td><td>BROWN CEMENTED SAND + GRAVEL</td><td></td><td>X</td></tr><tr><td>8</td><td>60</td><td>80</td><td>GRANITE Boulders</td><td></td><td>X</td></tr><tr><td>8</td><td>80</td><td>96</td><td>CEMENTED SAND GRAVEL + Boulders</td><td></td><td>X</td></tr><tr><td>8</td><td>96</td><td>120</td><td>BROWN CLAY</td><td></td><td>X</td></tr><tr><td>6</td><td>120</td><td>200</td><td>BROWN CLAY</td><td></td><td>X</td></tr><tr><td>6</td><td>200</td><td>204</td><td>GREEN CLAY</td><td></td><td>X</td></tr><tr><td>6</td><td>204</td><td>207</td><td>BLUE SAND</td><td></td><td>X</td></tr><tr><td>6</td><td>207</td><td>219</td><td>BLUE + BROWN CLAY</td><td></td><td>X</td></tr><tr><td>6</td><td>219</td><td>234</td><td>BLUE Muddy SAND</td><td></td><td>X</td></tr><tr><td>6</td><td>234</td><td>330</td><td>BROWN CLAY</td><td></td><td>X</td></tr><tr><td>6</td><td>330</td><td>345</td><td>SOFT BROWN CLAYSTONE</td><td></td><td>X</td></tr><tr><td>6</td><td>345</td><td>380</td><td>BROWN SANDSTONE</td><td></td><td>X</td></tr><tr><td>6</td><td>380</td><td>390</td><td>BLUE CLAY</td><td></td><td>X</td></tr><tr><td>6</td><td>390</td><td>404</td><td>BROWN CLAYSTONE + WOOD</td><td></td><td>X</td></tr><tr><td>6</td><td>404</td><td>440</td><td>GRAY SANDY CLAY</td><td></td><td>X</td></tr><tr><td>6</td><td>440</td><td>467</td><td>BLUE SANDY CLAY</td><td></td><td>X</td></tr><tr><td>6</td><td>467</td><td>500</td><td>BLUE SANDSTONE</td><td></td><td>X</td></tr><tr><td>6</td><td>500</td><td>540</td><td>HARD GRAY GRANITE 530'</td><td></td><td>X</td></tr></tbody></table>	Bore Diam.	Depth		Material	Water		From	To	Yes	No	10	0	1	Top Soil		X	10	1	9	BROWN SANDY CLAY + Boulders		X	10	9	19	BROWN CEMENTED SAND + GRAVEL		X	8	19	32	BROWN CEMENTED SAND + GRAVEL		X	8	32	48	GRANITE Boulders		X	8	48	60	BROWN CEMENTED SAND + GRAVEL		X	8	60	80	GRANITE Boulders		X	8	80	96	CEMENTED SAND GRAVEL + Boulders		X	8	96	120	BROWN CLAY		X	6	120	200	BROWN CLAY		X	6	200	204	GREEN CLAY		X	6	204	207	BLUE SAND		X	6	207	219	BLUE + BROWN CLAY		X	6	219	234	BLUE Muddy SAND		X	6	234	330	BROWN CLAY		X	6	330	345	SOFT BROWN CLAYSTONE		X	6	345	380	BROWN SANDSTONE		X	6	380	390	BLUE CLAY		X	6	390	404	BROWN CLAYSTONE + WOOD		X	6	404	440	GRAY SANDY CLAY		X	6	440	467	BLUE SANDY CLAY		X	6	467	500	BLUE SANDSTONE		X	6	500	540	HARD GRAY GRANITE 530'		X
Bore Diam.	Depth		Material	Water																																																																																																																																																	
	From	To		Yes	No																																																																																																																																																
10	0	1	Top Soil		X																																																																																																																																																
10	1	9	BROWN SANDY CLAY + Boulders		X																																																																																																																																																
10	9	19	BROWN CEMENTED SAND + GRAVEL		X																																																																																																																																																
8	19	32	BROWN CEMENTED SAND + GRAVEL		X																																																																																																																																																
8	32	48	GRANITE Boulders		X																																																																																																																																																
8	48	60	BROWN CEMENTED SAND + GRAVEL		X																																																																																																																																																
8	60	80	GRANITE Boulders		X																																																																																																																																																
8	80	96	CEMENTED SAND GRAVEL + Boulders		X																																																																																																																																																
8	96	120	BROWN CLAY		X																																																																																																																																																
6	120	200	BROWN CLAY		X																																																																																																																																																
6	200	204	GREEN CLAY		X																																																																																																																																																
6	204	207	BLUE SAND		X																																																																																																																																																
6	207	219	BLUE + BROWN CLAY		X																																																																																																																																																
6	219	234	BLUE Muddy SAND		X																																																																																																																																																
6	234	330	BROWN CLAY		X																																																																																																																																																
6	330	345	SOFT BROWN CLAYSTONE		X																																																																																																																																																
6	345	380	BROWN SANDSTONE		X																																																																																																																																																
6	380	390	BLUE CLAY		X																																																																																																																																																
6	390	404	BROWN CLAYSTONE + WOOD		X																																																																																																																																																
6	404	440	GRAY SANDY CLAY		X																																																																																																																																																
6	440	467	BLUE SANDY CLAY		X																																																																																																																																																
6	467	500	BLUE SANDSTONE		X																																																																																																																																																
6	500	540	HARD GRAY GRANITE 530'		X																																																																																																																																																
4. METHOD DRILLED ☒ Rotary ☒ Air ☐ Hydraulic ☐ Reverse rotary ☐ Cable ☐ Dug ☐ Other _____	10. Work started <u>6-14-89</u> finished <u>6-22-89</u>																																																																																																																																																				
5. WELL CONSTRUCTION Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____ <table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th>Thickness</th><th>Diameter</th><th>From</th><th>To</th></tr></thead><tbody><tr><td>3.22 inches</td><td>8 inches</td><td>1 feet</td><td>66 feet</td></tr><tr><td>1.25 inches</td><td>6 inches</td><td>1 feet</td><td>404 feet</td></tr><tr><td>sch. 40 inches</td><td>4 inches</td><td>393 feet</td><td>540 feet</td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></tbody></table> 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 <u>1/8</u> inches by <u>4</u> inches <table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th>Number</th><th>From</th><th>To</th></tr></thead><tbody><tr><td>75 perforations</td><td>393 feet</td><td>414 feet</td></tr><tr><td>75 perforations</td><td>520 feet</td><td>540 feet</td></tr><tr><td> </td><td> </td><td> </td></tr></tbody></table> 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 <u>1/4 PEA</u> Placed from <u>400</u> feet to <u>540</u> feet Surface seal depth <u>19</u> Material used in seal: ☐ Cement grout ☐ Bentonite ☐ Puddling clay ☐ _____ Sealing procedure used: ☐ Slurry pit ☐ Temp. surface casing ☒ Overbore to seal depth Method of joining casing: ☒ Threaded ☒ Welded ☐ Solvent <u>4"</u> <u>8+6</u> Weld ☐ Cemented between strata Describe access port <u>SANITARY Well Seal</u>	Thickness	Diameter	From	To	3.22 inches	8 inches	1 feet	66 feet	1.25 inches	6 inches	1 feet	404 feet	sch. 40 inches	4 inches	393 feet	540 feet					Number	From	To	75 perforations	393 feet	414 feet	75 perforations	520 feet	540 feet																																																																																																																								
Thickness	Diameter	From	To																																																																																																																																																		
3.22 inches	8 inches	1 feet	66 feet																																																																																																																																																		
1.25 inches	6 inches	1 feet	404 feet																																																																																																																																																		
sch. 40 inches	4 inches	393 feet	540 feet																																																																																																																																																		
Number	From	To																																																																																																																																																			
75 perforations	393 feet	414 feet																																																																																																																																																			
75 perforations	520 feet	540 feet																																																																																																																																																			
6. LOCATION OF WELL Sketch map location <u>must</u> agree with written location. N W 35' X E S VALLEY County <u>VALLEY</u> Subdivision Name _____ Lot No. _____ Block No. _____ S.E. 1/4 NE 1/4 Sec. 35, T. 19N N/S, R. 3E EW.	11. DRILLERS CERTIFICATION I/We certify that all minimum well construction standards were complied with at the time the rig was removed. Firm Name <u>GESTIN PUMP WELL</u> Firm No. <u>408</u> Address <u>HC 58 BOX 10 DONNELLY</u> Date <u>6-22-89</u> Signed by (Firm Official) <u>Robert H. Gestin</u> and (Operator) <u>Robert H. Gestin</u>																																																																																																																																																				

USE TYPEWRITER OR
BALL POINT PEN

State of Idaho
Department of Water Administration

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Administration within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name One - John Council B.S.P.

Address Marshall Idaho

Owner's Permit No. _____

7. WATER LEVEL

Static water level 0 feet below land surface

Flowing? ☒ Yes ☐ No G.P.M. flow 3

Temperature _____ ° F. Quality _____

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 ☒ Bailor ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped
<u>20</u>	<u>8</u>	<u>2</u>

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Other (specify type)

☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection

9. LITHOLOGIC LOG

Hole Diam.	Depth		Material	Water	
	From	To		Yes	No
6	0	2	Top Soil		X
6	2	6	Sandy silt		X
6	6	19	Sandy clay		X
19	19	48	Clay		X
48	48	69	Clay + Rock		X
69	69	80	Clay + Gravel		X
80	80	118	Sandy Clay		X
118	118	139	Clay		X
139	139	149	Sandy Clay		X
149	149	175	Clay		X

4. METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 6 inches Total depth 175 feet

Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
<u>280</u> inches	<u>6</u> inches	<u>1</u> feet	<u>152</u> feet

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

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 20 Material used in seal ☐ Cement grout

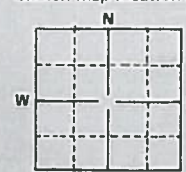
☒ Pudding clay ☐ Well cuttings

Sealing procedure used ☐ Slurry pit ☐ Temporary surface casing

☐ Overbore to seal depth

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name BA

Lot No. _____ Block No. _____

County Valley

S.W. $\frac{1}{4}$ 4E $\frac{1}{4}$ Sec. 35, T. 18 N/S, R. 3 E/W

10.

Work started June 16 finished July 1

11. DRILLERS CERTIFICATION

Firm Name H. H. & H. H. Drilling Firm No. 121

Address Payette Idaho Date _____

Signed by (Firm Official) Norman Hallaway

and

(Operator) Norman Hallaway

USE ADDITIONAL SHEETS IF NECESSARY

FORWARD THE WHITE COPY TO THE DEPARTMENT

Well near
maintenance
shop

FIELD EXAM PHOTOS

Water Right Permit: 65-13297

Field Exam Date: 8-16-13

PLS: NE1/4, NE1/4 Section 35, T.19N, R.03E

Field Examiner: RC



Point of Diversion & Place of Use: View southwesterly of the ground water well located near the maintenance shop. This well is known as the 'Winter Well', and generally serves one cabin yeararound. If needed, this well can serve a total of seven (7) buildings. Cabins and buildings served by the Boy Scouts of America water system are shown in the background.



View inside the maintenance shop of the pressure tank and supply and discharge piping from the 'Winter Well' located near the maintenance shop.



View southwesterly of a ground water well, known as the 'Main Well', a 50,560-gallon steel water storage tank, and the pump house. A concrete manhole/vault near the well contains a water storage tank bypass valve and a water system flush valve.



View inside of the pump house of the five (5) pressure tanks and the 1 1/4" galvanized steel supply line. A Berkeley 7.5-hp centrifugal booster pump is shown to the left.