

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 65-22870

Exam Date: 7/23/2012

1. Current Owner: RONALD L JARMIN
5505 MONTGOMERY RD
EMMETT ID 83617
(208)584-3649
2. Accompanied by: Ron Jarmin
Phone No:
Address:
Relationship to Permit Holder:

3. SOURCE TRIBUTARY
GROUND WATER

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. LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER

NE1/4SW1/4

Sec. 16, Twp 07N, Rge 01E, B.M.

GEM County

Method of Determination: Arc Map (Aerial Photo); GPS Latitude N.43°56.629', Longitude W.116°20.658'; Datum – NAD83.

2.

PLACE OF USE: IRRIGATION

Twp Rge Sec	NE				NW				SW				SE				Totals
07N 01E 16	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	3.0
								1.4	1.6								

Total Acres: 3

PLACE OF USE: DOMESTIC

Twp Rge Sec	NE				NW				SW				SE				Totals
07N 01E 16	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
									X								

Method of Determination: Arc Map (Aerial Photo)

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>
__(Unknown)__	_____	_2_	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

*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>
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

2. Measurements: No field measurement. Pitot tube too small for 3/8" sprinkler head nozzle. Gauge pressure of 42 psi.

E. FLOW CALCULATIONS

____ Additional Computation Sheets Attached

Measured Method: (Theoretical)

$$\begin{aligned} \text{HP} &= 2 \\ Z &= 61' \text{ (IDWR Theoretical Dynamic Level Pumping Diagram for wells)} \\ P &= 42 \text{ psi (gauge)} \end{aligned}$$

$$Q(\text{theoretical}) = 8.8 \times 0.7 \times 2/61 + (2.31 \times 42) = 12.32/158.02 = 0.08 \text{ cfs}$$

$$Q(\text{theoretical}) = 0.08 \text{ cfs} < 0.17 \text{ cfs } Q(\text{permit})$$

Right holder is irrigating approximately 3.0 acres, not 5.0 acres as indicated on the permit. Based on 3.0 acres of irrigation and domestic internal use, the water appropriation reduces to 0.11 cfs, which still exceeds the theoretical flow calculation. Based on the current irrigation practices of irrigating a small area of field with on sprinkler at a time, it appears that the current pumping system is adequate to meet the domestic and irrigation requirements for the right holder.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 3.0 \times 4.5 = 13.5 \text{ AFA}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.09 \times 260 \times 1.9835 = 46.4 \text{ AFA}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 13.5 \text{ AFA}$$

2. Volume Calculations for Other Uses: Domestic – 1 home (Internal)

$$V = 1 \text{ home} \times 0.6 \text{ AFA} = 0.60 \text{ AFA}$$

G. NARRATIVE/REMARKS/COMMENTS**PUMP DELIVERY SYSTEM:**

A 2 hp submersible pump in a ground water well delivers water to one home for domestic internal use, and to a pressurized irrigation system for irrigation of a field, lawn, garden, and landscaping. The right holder was not able to provide the size of the discharge piping for the home or the irrigation system. However, since the irrigation risers are 1 1/2", it is assumed that the irrigation main line from the well may be 1 1/2" pipe.

IRRIGATION SYSTEM:

Approximately 3.0 acres of field, lawn, garden, and landscaping are irrigated from the ground water well. The field, which borders the homesite on the north and east, is irrigated by rainbird sprinklers connected to long sections of hose. Four 1 1/2" irrigation risers are located in the field near the boundary between the lawn and field. The hoses are relocated to the irrigation risers to irrigate the field and the garden area. The lawn and landscaping areas are irrigated by pop-up sprinklers and drip lines.

PLACE OF USE:

Place of use as indicated on the permit is incorrect and needs to be changed. An amendment at the time of licensure will be required to correctly identify the place of use.

SHAPE FILE:

The shape file is shown incorrectly in the Departments data base and will need to be amended.

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

RATE &/OR STORAGE RECOMMENDED FOR LICENSING

Description	Rate of Flow (cfs)		Storage (af)
Permit Amount	0.17	&/or	N/A
Beneficial Use Limit	0.11	&/or	N/A
System Measurement	0.08 (theoretical)	&/or	N/A
Proof Fee Amount	0.20	&/or	N/A
Recommended Amount	0.11	&/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>
IRRIGATION	03/01 to 11/15	0.090 CFS	13.5 AFA
DOMESTIC	01/01 to 12/31	0.020 CFS	0.60 AFA
<u>Totals:</u>		0.110 CFS	14.1 AFA

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

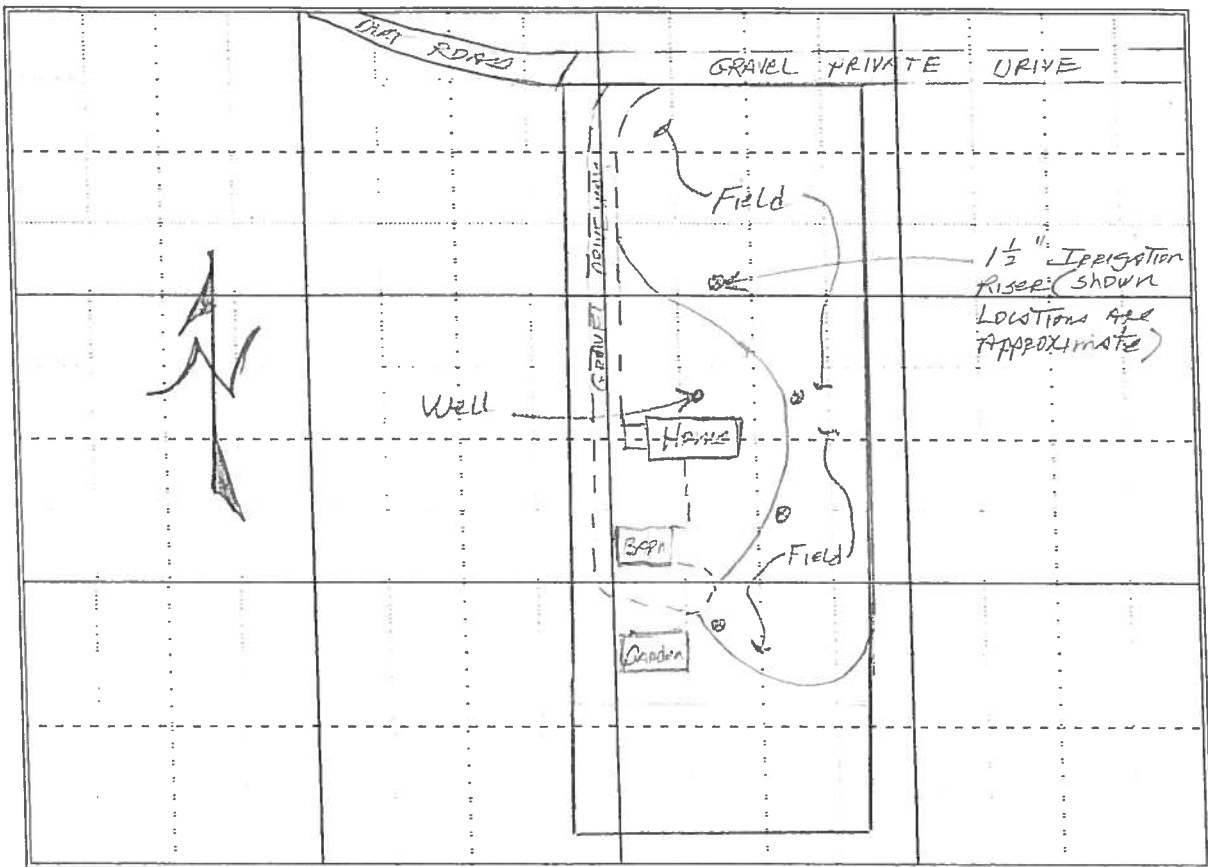
Field Examiner's Name Rick Collingwood Date 10-5-12

Reviewer _____ Date _____

65-22870



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

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

054376

Office Use Only
Inspected by _____
Twp _____ Rge _____ Sec _____
1/4 _____ 1/4 _____ 1/4 _____
Lat _____ Long _____
☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

1. WELL TAG NO. D 0009758
DRILLING PERMIT NO. 65-99-W-0157-000
Other IDWR No. _____

2. OWNER:
Name Ron Jarmin
Address % Terry Gardner 1620 S. Plaza
City Emmett State ID Zip 83617

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

North ☒ or South ☐
East ☒ or West ☐
Twp. 7N Rge. 1 Sec. 16 Gov't Lot _____
SW 1/4 NE 1/4 160 acres
Lat: _____ Long: _____
Address of Well Site Montour
City Emmett
Heights Rd
(Give least name of road - Distance to Road or Landmark)

Lt. _____ Blk. _____ Sub. Name Montour
Heights

4. USE:
☒ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other _____

5. TYPE OF WORK check all that apply (Replacement etc.)
☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD
☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEA/FILTER PACK	AMOUNT	METHOD
Material	From To Sacks or Pounds	
<u>Bentonite</u>	<u>0 31</u>	<u>500#</u>
		<u>overbore</u>

Was drive shoe used? ☒ N Shoe Depth(s) 58'
Was drive shoe seal tested? ☐ Y ☒ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Linear	Welded	Threaded
<u>6"</u>	<u>12</u>	<u>58</u>	<u>250</u>	<u>Steel</u>	☒	☐	☒	☐
<u>4.5"</u>	<u>50</u>	<u>111</u>		<u>PVC</u>	☐	☒	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

From	To	Slot Size	Number	Diameter	Material	Casing	Linear
<u>111</u>	<u>211</u>	<u>1/4"</u>	<u>—</u>	<u>4.5"</u>	<u>PVC</u>	☐	☒

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

51 ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access, port, or control devices: MICROFILMED

11. WELL TESTS:

Yield gal/min	Drawdown	Pumping Level	Time
<u>100</u>			<u>1 hour</u>

Water Temp. 61° Bottom hole temp. _____
Water Quality test or comments: Iron .75 Grains
PH 8+ Depth first Water Encounter 1

12. LITHOLOGIC LOG: (Describe repairs or abandonment) Wa

Bore Dia	From	To	Remarks: Lithology, Water Quality & Temperature	Y
"	0	3	top soil	
"	3	31	very hard brown clay	
"	31	35	brown & gray clay rock	
"	35	59	gray lava rock	
"	59	66	black lava rock	
"	66	70	red lava rock	
"	70	78	hard blue clay	
"	78	86	black lava rock	
"	86	90	black lava rock w/hard blue clay pcs	
"	90	98	black lava rock	
"	98	107	redish lava rock w/blue clay pcs	
"	107	109	redish lava	
"	109	110	black lava	
"	110	112	black lava rock	X
"	112	140	lava rock	X
"	140	150	lava rock	
"	150	153	red lava rock w/some blue clay	X
"	153	160	black lava rock	
"	160	161	red lava rock	
"	161	199	redish lava rock & gray lava	
"	199	211	redish lava rock w/blue clay pcs	X

RECEIVED RECEIVED

MICROFILMED JUL 07 1999 JUL 13 1999

WATER RESOURCES Department of Water Resources
WESTERN REGION

Completed Depth 211' (Measurab
Date: Started 6-24-99 Completed 6-28-99

13. DRILLER'S CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Adamson Pump & Drill No. 045

Firm Official Dave Adamson Date 6-29-99

and Driller or Operator DAVE ADAMSON Date 6-29-99

(Sign once if Firm Official & Operator)

FIELD EXAM PHOTOS

Water Right Permit: 65-22870

Field Exam Date: 7-24-12

PLS: NE1/4, SW1/4 Section 16, T.07N, R.01E.

Field Examiner: RC



Point of Diversion: View northerly of ground water well. Well is used for domestic internal use for home and irrigation of lawn, landscaping, garden, and field surrounding the homesite.



Place of Use: View northeasterly of typical field irrigation. Hoses are connected to 1 1/2" risers positioned along the western edge of field.