

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-12562

Exam Date: 4/17/2013

1. Current Owner: FREDERICK ROBERT LAPPIN
16557 HOLLOW RD
CALDWELL ID 83605
(208)454-3984

JEREE LAPPIN
16557 HOLLOW RD
CALDWELL ID 83607
(208)454-3984

2. Accompanied by: Robert Lappin

Phone No: Same

Address: Same

Relationship to Permit Holder:

3. **SOURCE****TRIBUTARY**

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 63-12563
2. Other water rights with the same point of diversion: None

C. DIVERSION AND DELIVERY SYSTEM1. **LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER

NE1/4NW1/4

Sec. 8, Twp 05N, Rge 03W, B.M.

CANYON County

Method of Determination: Arc Map (Aerial Photo); GPS – Latitude N.43°47.602', Longitude W.116°43.401'; Datum – NAD83.

2.

PLACE OF USE: STOCKWATER

Twp	Rge	Sec	NE				NW				SW				SE				Totals
05N	03W	8	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
							X												

DOMESTIC same as STOCKWATER

Method of Determination:

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>
N/A	Franklin	1.5	Unknown	Unknown	Unknown

*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. One pressure tank for home and stock water trough. Gauge pressure of 38 psi.

E. FLOW CALCULATIONS Additional Computation Sheets Attached

Measured Method: (Theoretical Horsepower Equation)

$$Q = 8.8 \times 0.7 \times 1.5/150 + (2.31 \times 38) = 9.24/237.78 = 0.04 \text{ cfs}$$

$$Q(\text{theoretical}) = 0.04 \text{ cfs} < 0.06 \text{ cfs } Q(\text{permit})$$

$$HP = 1.5$$

$$Z = 150' \text{ (Assumed)}$$

$$P = 38 \text{ psi (Gauge)}$$

Appears that the current pump capacity is not capable of attaining the permit diversion rate of 0.06 cfs. Recommend a 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: Stock Water – 9 Head of Cattle

$$V_r = (9 \times 12 \times 365) / 325,850 = 0.12 \sim 0.10 \text{ AFA}$$

$$V_d = 0.02 \times 365 \times 1.9835 = 14.48 \sim 14.5 \text{ AFA}$$

$$V_r < V_d, \text{ Recommend } V_r = 0.10 \text{ AFA}$$

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

A 1.5 hp submersible pump in a ground water well diverts water to one (1) home for domestic use and to an automatic filling and heated watering trough. The watering trough provides drinking water to nine (9) head of cattle.

The irrigation well (Water Right Permit No. 63-12563), is the main source of water for watering the lawn, landscaping, and garden areas. However, the ground water well serving the home is also connected to the lawn area pressurized irrigation system, and is available for irrigating the lawn, landscaping, and garden areas if the irrigation well is inoperable.

OVERLAP ANALYSIS:

Place of Use: The place of use for Water Right Permits No. 63-12562 and 63-12563 overlap for irrigating the lawn, landscaping, and garden areas.

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

RATE &/OR STORAGE RECOMMENDED FOR LICENSING

Description	Rate of Flow (cfs)		Storage (af)
Permit Amount	0.06	&/or	N/A
Beneficial Use Limit	0.06	&/or	N/A
System Measurement	0.04 (theoretical)	&/or	N/A
Proof Fee Amount	0.20	&/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>
STOCKWATER	1/01 to 12/31	0.020 CFS	~~0.10 AFA~~ N/A RC 6/28/13
DOMESTIC	1/01 to 12/31	0.040 CFS	N/A
<u>Totals:</u>		0.040 CFS	~~0.10 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 Lick Collingwood Date 6/25/13

Reviewer _____ Date _____

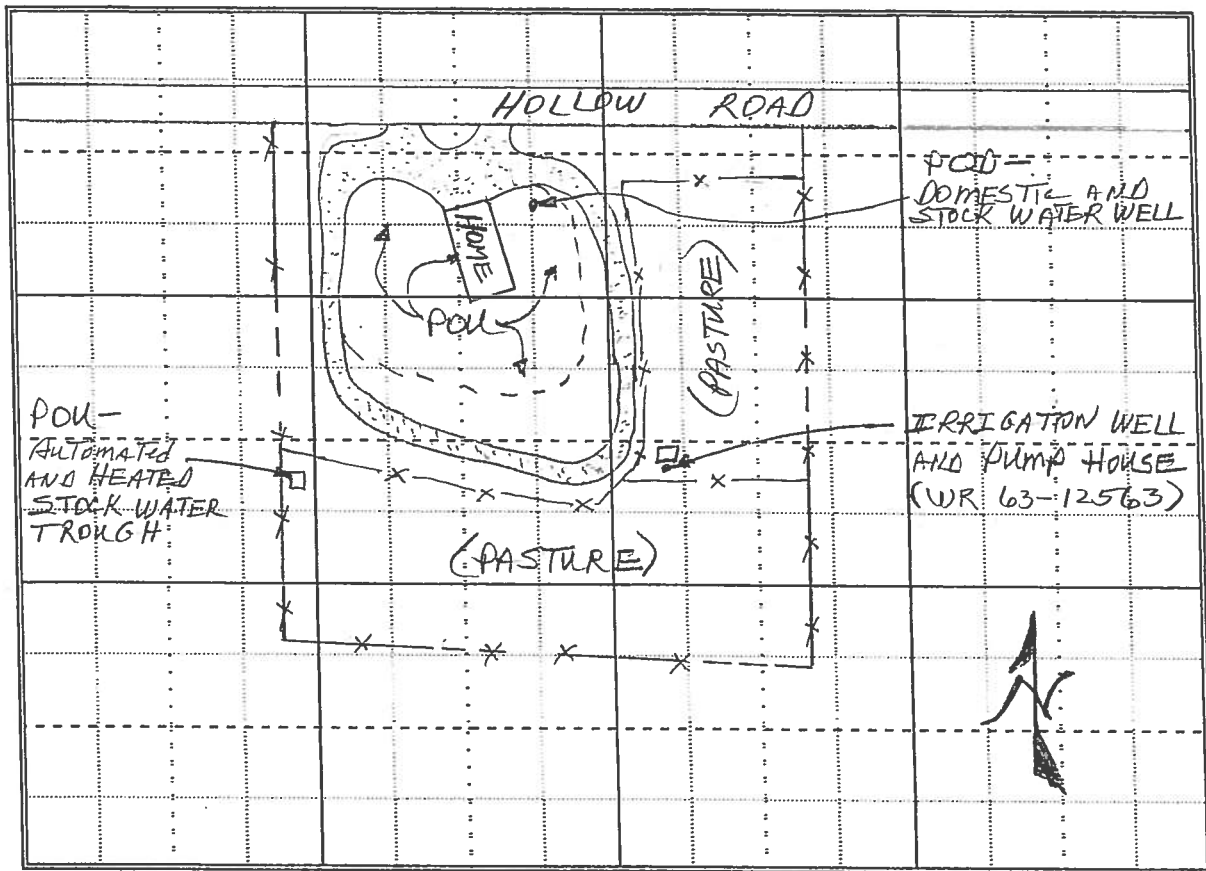
63-12562

ESRI AERIAL PHOTO - 2012



0 55 110 220 330 440 Feet

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

FIELD EXAM PHOTOS

Water Right Permit: 63-12562

Field Exam Date: 4-17-13

PLS: NE1/4, NW1/4 Section 8, T.5N, R.03W.

Field Examiner: RC



Point of Diversion: View easterly of the ground water well. The primary service for the well is the home and a stock water trough. However, this well is connected to the lawn irrigation system and can be used if the irrigation well is not in operation.



Place of Use: View southwesterly of home and lawn area.



Place of Use: View southerly of the automated and heated stock water trough for the nine head of cattle.



State of Idaho

DEPARTMENT OF WATER RESOURCES

Western Region, 2735 Airport Way • Boise, Idaho 83705-5082

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C. L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Interim Director

April 2, 2013

Fredrick R. & Jeree Lappin
16557 Hollow Road
Caldwell, Idaho 83607

RE: Scheduling Field Exam for Water Right Permit No. 63-12562

We are planning to **conduct water right field examinations** in the vicinity of the above-referenced permit **during the week of April 15, 2013**. An examination is needed to verify your water use in order to issue a water right license.

Please be advised that you will need to operate your system under normal operating conditions during the examination. The permit authorizes the diversion of ground water for domestic use and stock water for 3 head of cattle and/or horses.

In order to conduct your exam as efficiently as possible, we ask that you call this office to schedule a day and time convenient for you. **Please call me at 208-334-2190 by April 12, 2013, to conduct the exam during the week of April 15, 2013.** If there is a problem with scheduling or conducting the examination at this time, please let me know so we can reschedule or make other arrangements.

I appreciate your attention to this matter and I look forward to hearing from you.

Sincerely,

A handwritten signature in cursive script that reads "Rick Collingwood".

Rick Collingwood, P.E.
Water Resource Agent, Sr.