

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 75-14751

Exam Date: 6/18/2014

1. Current Owner: IDAHO DEPT OF TRANSPORTATION
PO BOX 97
RIGBY ID 83442
208-745-5667
2. Accompanied by: None
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: 75-7166 (Commercial & Domestic)
2. Other water rights with the same point of diversion: None

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

GROUND WATER NE1/4SE1/4 Sec. 31, Twp 22N, Rge 22E, B.M. LEMHI County

Method of Determination: GPS, Site Visit

2.

<u>PLACE OF USE:</u>		INDUSTRIAL																	
Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
22N	22E	31													X				

Method of Determination: Site Visit

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</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>
ID No.* D0020816	Unknown - underground				

*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>
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2. Measurements:
None – no way to measure

E. FLOW CALCULATIONS

____ Additional Computation Sheets Attached

Measured Method: None

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

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

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

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

2. Volume Calculations for Other Uses: In an email from Randy Drake, TSEA, Operation in Rigby (208)745-5609 the following volumes were given:

In 2013 approximately 290,000 gallons were pumped to mix brine, 20 trucks were filled at 2500 gallons per truck and approximately 5 trucks and trailers were washed at 2500 gallons total.

$$290000 + 50000 + 2500 = 342500 / 325850 = 1.05 \text{ AF} = 1.1 \text{ AF}$$

G. NARRATIVE/REMARKS/COMMENTS

Per Randy Drake and site visit no measurement devices were installed, they may install at a later date.

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

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
INDUSTRIAL	01/01 to 12/31	0.220 CFS	1.10 AF
<u>Totals:</u>		0.220 CFS	1.10 AF

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 Kerrie Mathews Date 6.18.2014

Reviewer _____ Date _____



Field Exam June 19, 2014 Place of Use and Well 75-14751



0 0.0175 0.035 0.07 Miles

Field Exam 75-14751 June 18, 2014





GROUNDWATER THEORETICAL ANALYSIS

FILE: 75-14751

DATE: 12/24/14

BY: _____

THEORETICAL RATE OF FLOW: $Q = \frac{(8.8 \times (HP) \times (EFF.))}{TDH}$

Q = CFS

HP = Total Brake Horsepower of pumping plant (including booster)

Eff. = Pumping plant efficiency (assume 70% or 0.70)

TDH = Total dynamic head = [(LIFT) + (PSI X 2.31)]

LIFT = Depth to water in FEET from land surface to pumping water level

PSI = Pumping pressure measured in PSI near pump (if open discharge assume [0])

(8.8) X (2.0) X (0.70) 12.320

[(12.0) + (0.0 X 2.31)] 12.000

Q = 1.027

LIFT FROM:

PSI FROM:

NOTES ON PUMP:

Measurement ☐

Owner ☐

Area estimate ☒

Well Logs ☐

Booster Y ☐ N ☒

Measurement ☐

Owner ☐

Estimate ☒

Owner Gage ☐

Motor Make, Serial or ID

Pump Make, Serial or ID, rating

REMARKS: There are no well logs for either of the wells located on the Idaho Transportation Department property.

There are six well logs within the same QQ as this well. Construction dates range from 1971 to 1974 with static water levels varying between 5 and 12 feet.