

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 15-7254

Exam Date: 6/10/2014

1. Current Owner: WELTON E. or LELAND A. WARD
2310 N 100 W
MALAD ID 83252
(208)766-2523

2. Accompanied by: Welton Ward
Phone No: 208-766-2523
Address:
Relationship to Permit Holder:

3. SOURCE TRIBUTARY
GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: YES (Malad Valley Irrigation) 19 9/20th shares
2. Other water rights with the same point of diversion: No

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER SE1/4NW1/4 Sec. 4, Twp 14S, Rge 36E, B.M.
ONEIDA County

Method of Determination: Site Visit, GPS.

2.

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	
14S	36E	4									17.0	20.0							37.0
14S	36E	5													19.0				19.0

Total Acres: 56

PLACE OF USE: STOCKWATER

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	
14S	36E	4									X	X							
14S	36E	5													X				

Method of Determination: Site Visit, Aerial photography, Arc GIS

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>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</u> <u>Size</u>
D0059947	CROWN	40			
D0063315					
D0065593					

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

D. FLOW MEASUREMENTS

1.

<u>Measurement</u> <u>Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
Portable Flowmeter	FSC	Fuji	S10A1-00Y	A0L5539T		5/30/2014

2. Measurements: Pump sucks air. Unable to get measurements using a portable flowmeter. Attempted multiple locations on pipe and always received signal error.

Owner claims that when the system is operational it is able to pressurize 2 ½ quarter-mile pivots.

E. FLOW CALCULATIONS

☒ Additional Computation Sheets Attached

Measured Method: Theoretical

Sprinkler Counting Method

$$80 \text{ sprinklers} * 5 \text{ gpm} = 400 \text{ gpm} = .89 \text{ cfs}$$

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 56 \text{ Acres} \times 3.5 = 196 \text{ AF}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.89 \text{ CFS} \times 214 \text{ days} \times 1.9835 = 377.7 \text{ AF}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 196 \text{ AF}$$

2. Volume Calculations for Other Uses:

$$100 \text{ Range cattle} \times 12 \text{ gallons/day} \times 365 / 325850 \text{ gallons} = 1.3 \text{ AF}$$

G. NARRATIVE/REMARKS/COMMENTS

System runs off of a 40 horse power pump. At the time of measurement, the pump could run 2 and a half $\frac{1}{4}$ mile wheel lines. Pump was sucking too much air and unable to get a measurement with a portable flowmeter. Flow calculation is based on the sprinkler count method as the actual flow could not be measured with a flow meter. Permit was for 98 acres and 56 acres were developed for irrigation.

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>
IRRIGATION	04/01 to 10/31	0.890 CFS	196 AF
STOCKWATER	01/01 to 12/31	0.020 CFS	1.3 AF
<u>Totals:</u>		0.890 CFS	197.3 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

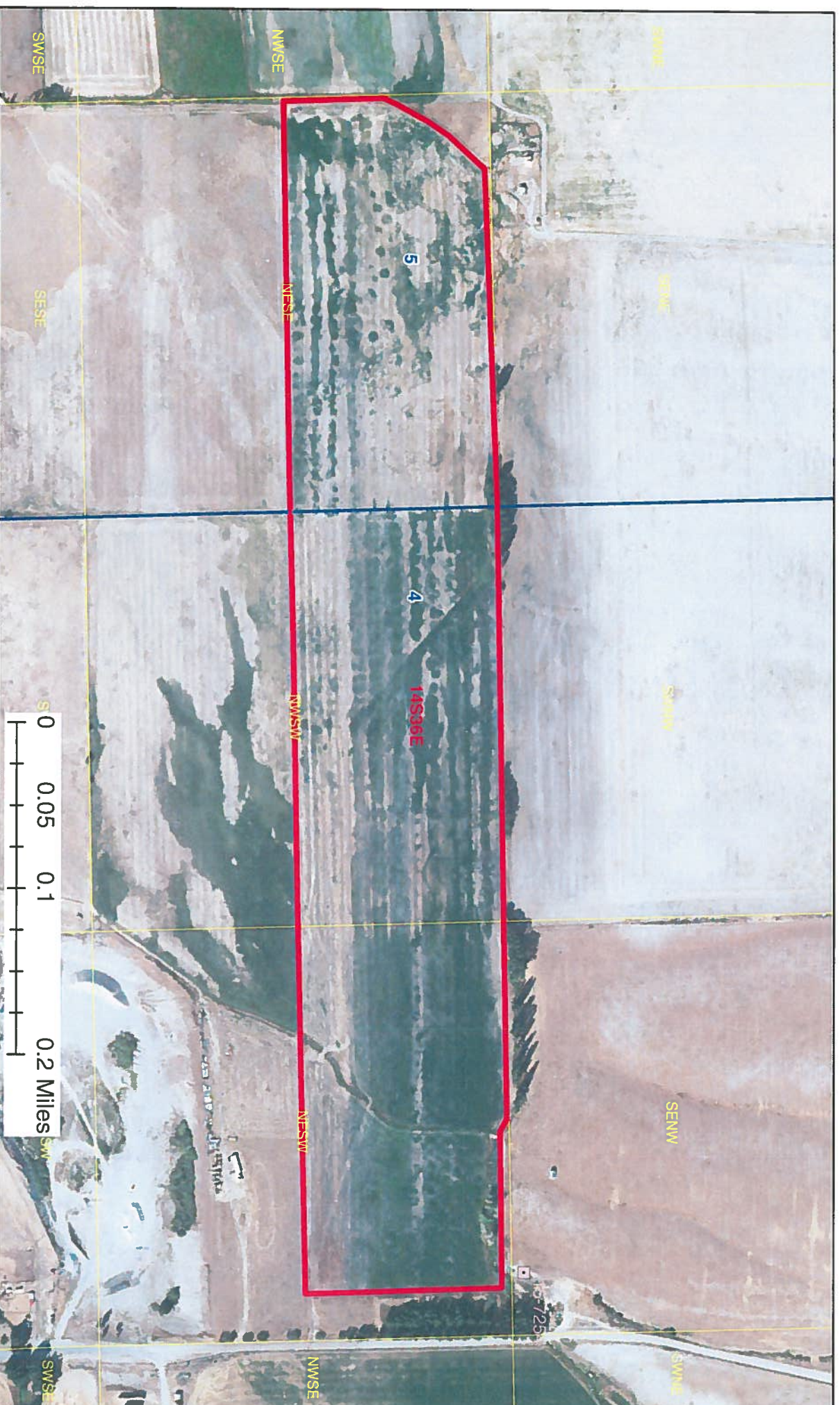
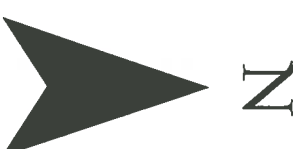
I. AUTHENTICATION

Field Examiner's Name Joe W. Byer Date 1-29-15

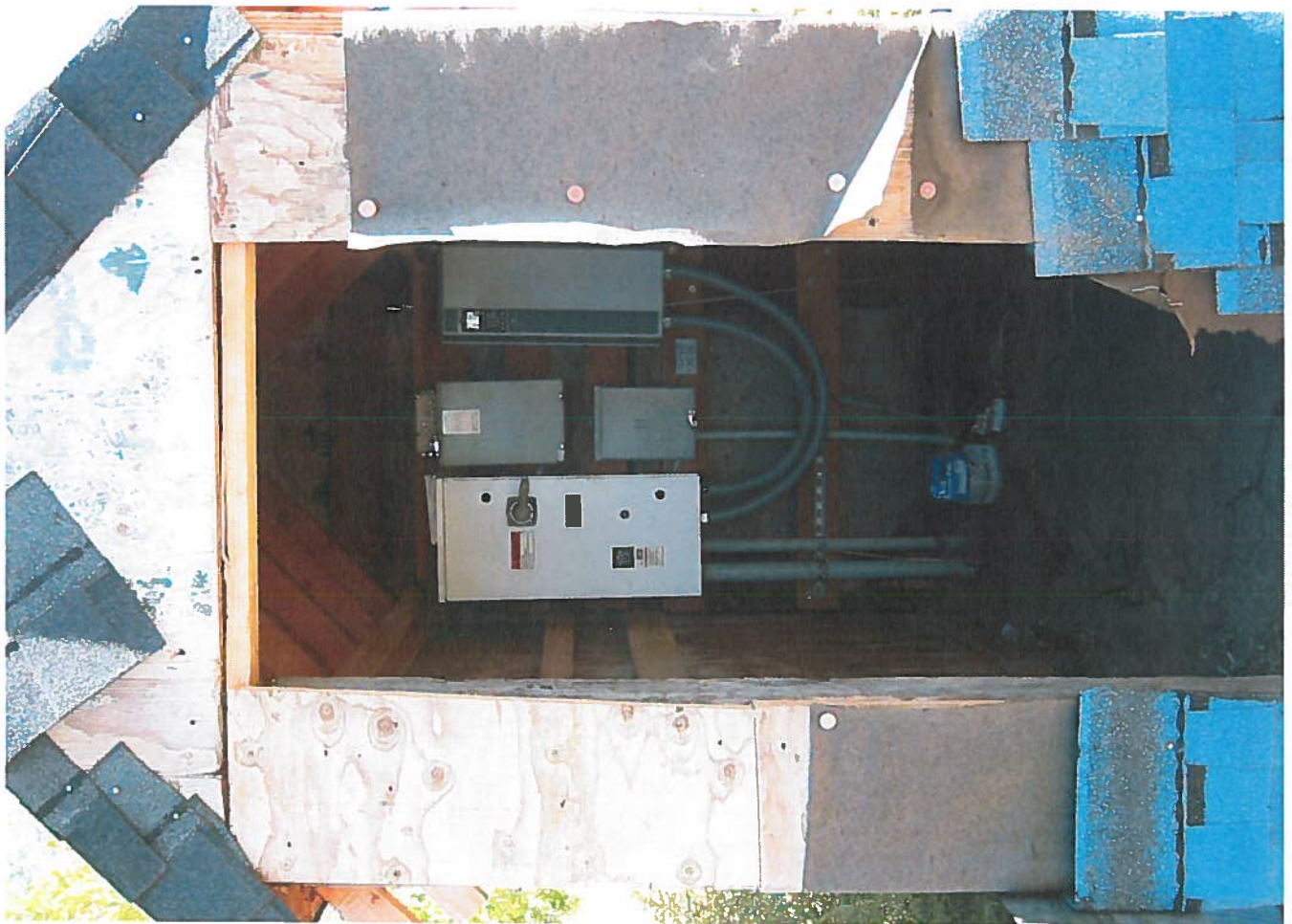
Reviewer _____ Date _____

Field Exam
Report
15-7254

Prepared by Scott Bergendorf
2013 Aerial Photography







IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

RECEIVED

SEP 30 2014

Department of Water Resources
Eastern Region1. WELL TAG NO. D 0065393

Drilling Permit No. _____

Water right or injection well # _____

2. OWNER: Leland Ward

Name _____

Address 2310 N 100 WCity Malad State Id Zip 83252

3. WELL LOCATION:

Twp. 14 North ☐ or South ☒ Bge. 36 East ☒ or West ☐Sec. 4 1/4 1/4 1/4 1/4Gov't Lot _____ County OneidaLat. 42 ° 14.139 (Deg and Decimal minutes)Long. 112 ° 15.526 (Deg and Decimal minutes)

Address of Well Site _____

City Malad

Lot. _____ Blk. _____ Sub. Name _____

4. USE:

☐ Domestic ☐ Municipal ☐ Monitor ☒ Irrigation ☐ Thermal ☐ Injection
☐ Other _____

5. TYPE OF WORK:

☐ New well ☐ Replacement well ☒ Modify existing well
☐ Abandonment ☐ Other _____

6. DRILL METHOD:

☒ Air Rotary ☐ Mud Rotary ☐ Cable ☐ Other _____

7. SEALING PROCEDURES:

Seal material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method/procedure

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/Schedule	Material	Casing Liner	Threaded	Welded
					☐	☐	☐
					☐	☐	☐
					☐	☐	☐
					☐	☐	☐

Was drive shoe used? ☐ Y ☐ N Shoe Depth(s) _____

9. PERFORATIONS/SCREENS:

Perforations ☐ Y ☐ N Method _____Manufactured screen ☐ Y ☐ N Type _____

Method of installation _____

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule

Length of Headpipe _____ Length of Tailpipe _____

Packer ☐ Y ☐ N Type _____

10. FILTER PACK:

Filter Material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method

11. FLOWING ARTESIAN:

Flowing Artesian? ☐ Y ☐ N Artesian Pressure (PSIG) _____

Describe control device _____

12. STATIC WATER LEVEL and WELL TESTS:

Depth first water encountered (ft) _____ Static water level (ft) _____

Water temp. (°F) _____ Bottom hole temp. (°F) _____

Describe access port _____

Well test:

Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)

Test method:

Pump	Bailer	Air	Flowing artesian
☐	☐	☐	☐

Water quality test or comments: _____

13. LITHOLOGIC LOG and/or repairs or abandonment:

Bore Dia. (in)	From (ft)	To (ft)	Remarks, lithology or description of repairs or abandonment, water temp.	Water	
				Y	N
10"	315	316	Cemented gravel		✓
10	316	317	Top yellowish shale		✓
10	317	380	Grey sandstone		✓
10	380	385	Grey + Green sandstone		✓
10	385	400	Brn sandstone		✓
10	400	405	Grey sandstone		✓
10	405	413	Green sandstone		✓
10	413	430	Brn sandstone shale		✓
10	430	442	Tan sandstone		✓
10	442	468	Brn sandstone shale		✓
10	468	478	Tanish greenish shale		✓
10	478	490	Brn Hard sandstone shale		✓
10	490	497	Broken Grey Brn Sandstone		✓
10	497	500	Hard white shale Broken		✓
10	500	506	Grey Broken Sandstone		✓
10	506	514	Brn sandstone Broken		✓
10	514	523	Grey sandstone		✓
10	523	527	Brn shale sandstone Broken		✓
10	527	574	Tan Sandstone		✓
10	574	590	Brn sandstone multicolored		✓
10	590	597	Greenish Grey Sandstone Broken		✓
10	597	638	Grey sandstone		✓
10	638	640	Brn Sandstone		✓
10	640	660	Green + Tan Brn shale sm Brn		✓
10	660	670	Tanish white Sandstone		✓
10	670	708	Grey sandstone soft		✓
10	708	718	Brn + grey sandstone		✓
10	718	735	Grey sandstone		✓
10	735	738	White Sandstone		✓
10	738	742	Brn Sandstone		✓
10	742	760	Grey sandstone soft		✓

Completed Depth (Measurable): _____

Date Started: 3-31-14 Date Completed: 4-14-14

14. DRILLER'S CERTIFICATION:

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

Company Name Mr. Ward's Drilling Co. No. 543Principal Driller Michael F. Ward Date 4-21-14Driller Miles F. Ward Date 4-28-14

Operator II _____ Date _____

Operator I _____ Date _____

* Signature of Principal Driller and rig operator are required.