

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 85-15392

Exam Date: 10/3/2012

1. Current Owner: JOE GRECO And
TRACI GRECO
2316 GRELLE AVE
LEWISTON ID 83501
(208) 743-0665

2. Accompanied by: permit holder

3. SOURCE

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 SYSTEM1. LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER SE1/4SW1/4 Sec. 13, Twp 35N, Rge 05W, B.M. NEZ PERCE County

Method of Determination: GPS (46.371809, -116.910078)

2.

PLACE OF USE: IRRIGATION AND DOMESTIC

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
35N	05W	13												2.2					2.2

Total Acres: 2.2

Method of Determination: Aerial imagery, permit holder statements, and visual inspection at site

3. ☐ NA Delivery System Diagram Attached.
☒ Map 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

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>
D0028230		15			

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>
NA—no physical measurement obtained						

E. FLOW CALCULATIONSMeasured Method: $8.8 \times 15 \times 0.7 / 745 + (2.31 \times 67) = 92.4/900 = 0.10$ cfs

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 2.2 \times 4 = 8.8 \text{ af}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.07 \times 245 \times 1.9835 = 34 \text{ af}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 8.8 \text{ AFA}$$

2. Volume Calculations for Other Uses: Domestic use (1 home, 1 shop, and 30,000 gallon pool)

Standard domestic use for 1 home = 0.6 af (shop included—no excess water uses in shop)

Pool for 30,000 gallons = 30,000 gallons / 325,850 = 0.09 af; typically pools are only filled once and topped off as water evaporates. Even if the Greco's drained the pool and filled it yearly, the volume required would be 0.1 af.

0.6 af for domestic use and 0.10 af for the pool = 0.7 afa

G. NARRATIVE/REMARKS/COMMENTS

The well diverts into two 2500 gallon tanks with a 15 horsepower pump. I measured 70 psi at the hydrant above the well and the indoor VFD panel was reading 67 psi. There is roughly 2.2 acres of lawn and garden around the home that is irrigated. The lawn immediately around the home is irrigated with an underground system as well as the patch of lawn that is located on the east side of the driveway. There are 25 sprinklers that put out 1.5 gpm/each per Mr. Greco. The patch that is south of the house does not appear to receive a lot of water but, according to Mr. Greco, that piece is irrigated with a hose and sprinkler only.

To double check the well's output that I calculated above against the demand for water; I conducted another calculation as follows:

Possible irrigation demand: 25 sprinklers x 1.5 gallons/minute = 37.5 gallons/minute but is limited by the duty of water for 2.2 acres → 0.07 cfs or 29.6 gallons/minute which is **43,000 gallons/day**

Possible domestic demand: (0.04 x 1.9835) x 325,850 = **26,000 gallons/day**

Well output = 0.10 cfs or 65,000 gallons/day

Total maximum demand = 69,000 gallons/day Can the well output keep up with the demand? YES, by the time the 5000 gallons of storage is accounted for, the system can put out nearly 70,000 gallons/day which is much more than what the permit holder requires.

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

Note on the POU: When I conducted the field exam, Mr. Greco told me that they irrigate everything on the lot that isn't covered by the home, shop, and driveway. I asked him how he irrigated the lawn and he told me he has in-ground sprinkler system immediately around the house but he must manually irrigate otherwise. I evaluated imagery from 2004 until current and can clearly decipher the lawn that is regularly irrigated while the other areas are questionable. When I conducted the field exam I could see a hose connected to the hydrant that could be used to irrigate the south 0.5 acre, which I understand as being a garden area. The lawn that is against the west boundary and the patch that is against Grelle Rd does not appear to have been irrigated ever. I did not see physical evidence of irrigation either. I believe that 2.2 acres is a generous estimate for this license.

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
DOMESTIC	01/01 to 12/31	0.040 CFS	0.7 AF
IRRIGATION	03/15 to 11/15	0.070 CFS	8.8 AF
<u>Totals:</u>		0.100 CFS	9.5 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

Chen Palmer

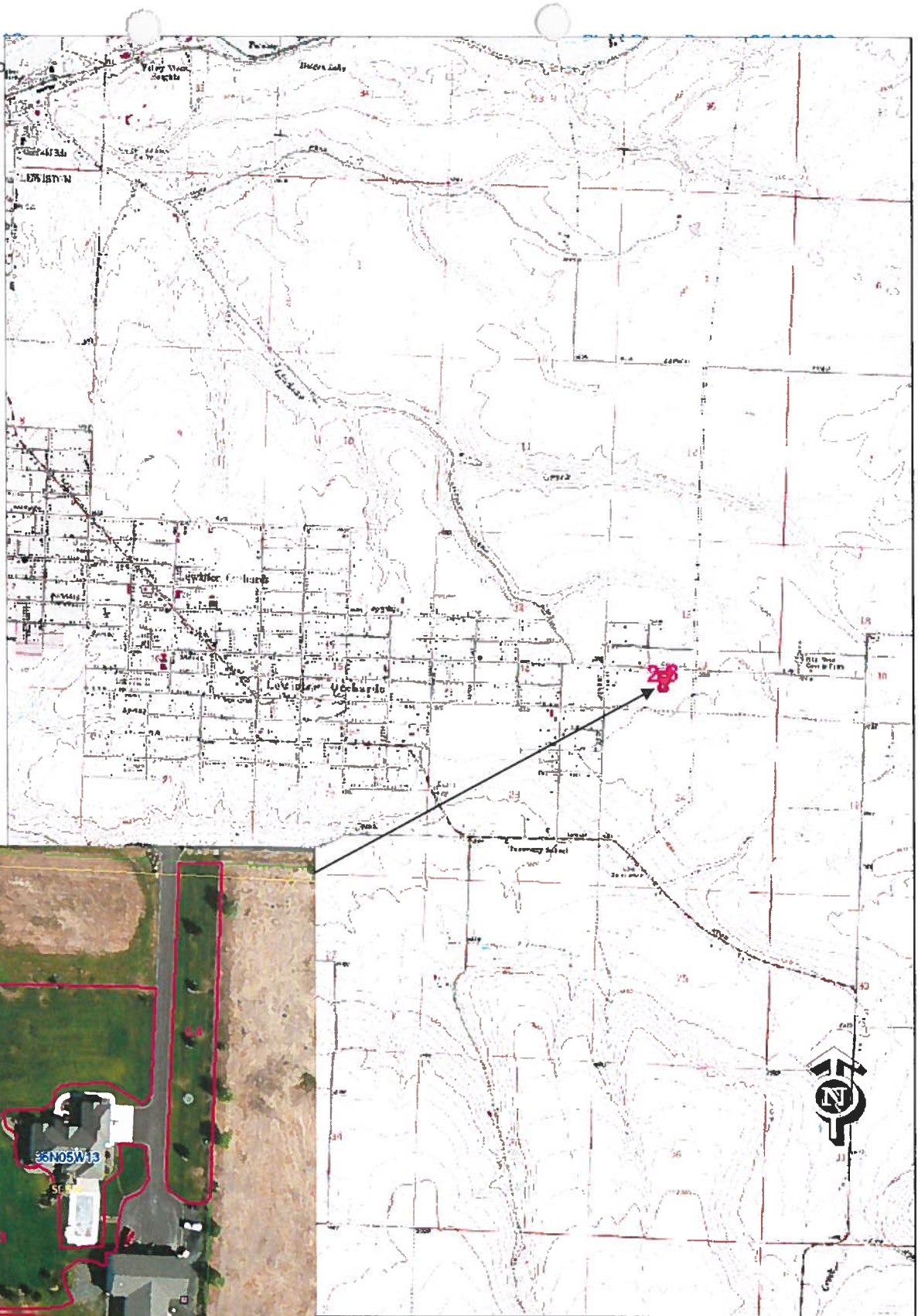
Date

10/30/12

Reviewer

Date







Well



70 psi



67 psi



15hp submersible pump



2 - 2500 gallon
storage tanks



Hose and hydrant
on the west side
of the shop.



View looking SW
Shop to my back



House

Pool

Facing W from
driveway



← not irrigated;
excepted from POV.

Imagery dating back
to 2004 doesn't show
irrigation in this
area



Type	WR #	Owner	Source	TRS	SESW	Significant? N/Y
Right	85 7652	DAVE D BEST,	GROUND WATER	35N05W13		4.5 N-neighbor
Right	85 7428	LEWISTON ORCHARDS IRRIGATION DIST	GROUND WATER	35N05W13	X	N-no shares
Right	85 7146	LEWISTON ORCHARDS IRRIGATION DIST	GROUND WATER	35N05W13	X	N-no shares
Right	85 7651	BRIAN CASTEEL, ELAINE BEST,	GROUND WATER	35N05W13		1.5 N-neighbor
Right	85 15392	JOE GRECO, TRACI GRECO,	GROUND WATER	35N05W13		3

Conclusion: There are no overlaps with the POU or PD per my research.

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

1. WELL TAG NO. D 0028230 RECEIVED

DRILLING PERMIT NO. 797508

Water Right or Injection Well No. APR 23 2003

2. OWNER: IDWR/North

Name JOE GRECO

Address 2425 POWERS AVE

City LEWISTON State WY Zip 83551

3. LOCATION OF WELL by legal description:

You must provide address or Lot, Blk, Sub. or Directions to well.

Twp. 5S North ☒ or South ☐

Rge. 5 East ☐ or West ☒

Sec. 13 NE 1/4 SE 1/4 1/4

Gov't Lot 161 County NEVADIA

Lat. : : Long. : :

Address of Well Site GRENE AVE City LEWISTON

(Give at least name of road + Distance to Road or Landmark)

Lt. Blk. Sub. Name

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

Seal Material	From	To	Weight / Volume	Seal Placement Method
<u>CEMENTITE</u>	<u>0</u>	<u>31</u>	<u>550</u>	<u>OVER CURE</u>

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 300

Was drive shoe seal tested? ☒ Y ☐ N How? AIR TEST

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
<u>8</u>	<u>0</u>	<u>300</u>	<u>250</u>	<u>STEEL</u>	☒	☐	☒	☐
<u>6</u>	<u>305</u>	<u>250</u>	<u>250</u>	<u>PIPE</u>	☐	☒	☐	☐

Length of Headpipe Length of Tailpipe

Packer ☐ Y ☐ N Type

9. PERFORATIONS/SCREENS PACKER TYPE

Perforation Method SAW

Screen Type & Method of Installation

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
<u>245</u>	<u>205</u>	<u>1/2 x 1/2</u>	<u>120</u>	<u>6</u>	<u>PLC</u>	☐	☒

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

600 ft. below ground Artesian pressure lb.

Depth flow encountered ft. Describe access port or control devices:

WELL CAP

35N 5W 13

Spud 11/11
301234

Office Use Only			
Well ID No.	<u> </u>		
Inspected by	<u> </u>		
Twp	Rge	Sec	
<u>1/4</u>	<u>1/4</u>	<u>1/4</u>	
Lat:	:	:	Long:
:	:	:	:

12. WELL TESTS:

☐ Pump ☐ Bailor ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
<u>100</u>	<u> </u>	<u>700</u>	<u>1 1/2</u>

Water Temp. 54 ° Bottom hole temp.

Water Quality test or comments: GOOD

Depth first Water Encounter 60

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
<u>10</u>	<u>0</u>	<u>15</u>	<u>CLAY</u>		
<u>10</u>	<u>15</u>	<u>20</u>	<u>GRAVEL</u>		
<u>10</u>	<u>20</u>	<u>25</u>	<u>CLAY</u>		
<u>10</u>	<u>25</u>	<u>30</u>	<u>GRAVEL</u>		
<u>10</u>	<u>30</u>	<u>35</u>	<u>CLAY & SAND</u>		
<u>10</u>	<u>35</u>	<u>40</u>	<u>CLAY</u>		
<u>7</u>	<u>40</u>	<u>50</u>	<u>GRAVEL</u>		
<u>7</u>	<u>50</u>	<u>55</u>	<u>CLAY</u>		
<u>7</u>	<u>55</u>	<u>60</u>	<u>CLAY</u>		
<u>7</u>	<u>60</u>	<u>65</u>	<u>CLAY</u>		
<u>7</u>	<u>65</u>	<u>70</u>	<u>GRAVEL</u>		
<u>7</u>	<u>70</u>	<u>75</u>	<u>CLAY</u>		
<u>7</u>	<u>75</u>	<u>80</u>	<u>GRAVEL</u>		

Completed Depth 705 (Measurable)

Date: Started 9-4-03 Completed 9-15-03

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 WILL T. SMITH Firm No. 616

Principal Driller Will Smith Date 9-16-03

and Driller or Operator II Date

Operator I Date

Principal Driller and Rig Operator Required.
Operator I must have signature of Driller/Operator II.

FORWARD WHITE COPY TO WATER RESOURCES