

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 67-15040
Exam Date: 6/7/2016

1. Current Owner:
ROBERT A DOBERSTEIN 854 UPPER RD WEISER ID 83672 (520) 508-2235
2. Accompanied by: Current Owner – info above.
Phone No:
Address:
Relationship to Permit Holder:

3. SOURCE: GROUND WATER**B. OVERLAP REVIEW**

1. Other water rights with the same place of use: Lower Payette DitchCo.
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 SE¼SW¼ Sec. 9, Twp 10N, Rge 05W, B.M. WASHINGTON County
GROUND WATER SE¼SW¼ Sec. 9, Twp 10N, Rge 05W, B.M. WASHINGTON County

Method of Determination: Garmin GPS data points collected during visit. Digital PLSS maps used with ArcMap tools.

2.

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
10N	05W	9												19.0					19.0

Total Acres: 19

Method of Determination: Irrigated area found using aerial imagery. Area measured using ArcMap tools.

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.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
D0069055	Unknown	3	Unknown	Unknown	6" Hose & Aluminum pipe
D0064342	Unknown	10	Unknown	Unknown	6" Hose & Aluminum pipe

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date

2. Measurements: No measurement collected.**E. FLOW CALCULATIONS**X Additional Computation Sheets Attached

Measured Method:

15 sprinklers per wheel line with 1/8" nozzles with a big gun sprinkler on the end.

System operates at 72 psi.

1/8" nozzle produces 4.05 gpm @ 75 psi

15 * 4.05 gpm = 60.75 gpm

1 11/64" nozzle on the end = 7.58 gpm and then there

Total gpm ~ 68.33 = 0.15 cfs

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

 $V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 19 \text{ acres} \times 4.5 \text{ af/acre} = 85.5 \text{ af}$ $V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.15 \text{ cfs} \times 260 \times 1.9835 = 77.4 \text{ af}$ $V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 77.4 \text{ af}$ 2. Volume Calculations for Other Uses: None.**G. NARRATIVE/REMARKS/COMMENTS**

Field exam was completed by agent Patrick Kelly on June 7, 2016 and was accompanied by land owner Robert Doberstein. Mr. Doberstein is the active permit owner since the assignment of permit was submitted by the original owner in May of 2016.

There are a total of 3 wells on the property. At the time of the field exam, only two of the wells were in use and delivering water to the system. The third well not being used is the farthest east well. Mr. Doberstein is interested in producing from the well, and has filed water right application 67-15158 to gain rights for it. Well tag D0069055 has a 3 hp submersible pump installed. Well tag D0064342 has a 10 hp submersible pump installed. Information regarding the type or serial information could not be determined during the exam. POD overlap did not find any other water rights associated with the wells. During the exam, it was observed that the wells only produce water for irrigation of the Place of Use.

Aerial imagery was used to determine irrigated acres. ArcMap tools were used to calculate a total area of 19 acres. Mr. Doberstein has recently built some farm structures on the property that cannot be seen in 2015 imagery. Because of these structures, it is likely that irrigation use is now less than 19 acres, however that area is what was developed during the beneficial use period. POU overlap review finds Lower Payette Ditch Co owns surface water rights to the grounds. Mr. Doberstein indicated surface water shares are not delivered to this particular property. No other overlap exists.

Mr. Doberstein indicated that he believed his system operates at around 100 gpm. Based on the information found during the field exam with a known nozzle size and pressure, the total diversion rate calculates to 68.3 gpm, or 0.15 cfs. A theoretical of the two wells estimates a total diversion of 0.41 cfs. The nozzle calculation is considerably lower than what the user believes and the theoretical calculated. However the owner is currently applying for additional water from a third well to help supplement his current use. It is reasonable to assume that the nozzle diversion rate is accurate based on the concerns of the user needing more water.

Have conditions of permit approval been met? X 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	03/01 to 11/15	0.15 CFS	77.4 AF
	<u>Totals:</u>	0.15 CFS	77.4 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 ☐ None

I. AUTHENTICATION

Field Examiner's Name Patrick Kelly Date 6-7-2016

Reviewer _____ Date _____

67-15040 System Diagram

SWSW

NESW

19 Acre POU

SESW

9

wheel line
16 sprinklers

10N05W

6" Al buried
mainline

WEST
WELL

EAST
WELL

SWSE

NENW

16

NWNE

THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 67-15040
 Reviewer: Patrick Kelly
 Date of Review: 6/7/2016

P/D No.:	Senerio 1	Senerio 2		
PUMP HORSEPOWER	10	3		
BOOSTER HORSEPOWER	0	0		
PUMPING LEVEL	30	30		
DISCHARGE PRESSURE	72	72		
RATE OF FLOW (cfs)	0.31	0.09	Total:	0.41

The above calculates the formula =
$$Q = \frac{8.8 * (\text{Efficiency}) * \text{hp}}{\text{depth to water} + 2.31 * (\text{psi}) + \text{friction}}$$

Assumptions: %70 efficiency.
 No Friction

Examiners Notes:

2 submersible pumps of 10 and 3 hp are used on 2 seperate wells. Lift assumed using well log information considering static water level and total depth. A PSI gauge on the system represents 72 psi on the system during normal operating conditions. Theoretical flow rate is 0.41 cfs.

IDAHO DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

1. WELL TAG NO. D 0064342
Drilling Permit No. 962098-868157
Water right or injection well # 67-15040

2. OWNER: C.S. Farms
Name Randy & Janine Smith
Address 1587 Lofer Lane
City Weiser State Id. Zip 83672

3. WELL LOCATION:
Twp. 10 North ☒ or South ☐ Rge. 5 East ☐ or West ☒
Sec. 9 1/4 SE 1/4 SW 1/4
Gov't Lot _____ County WASHINGTON
Lat. 44 ° 12.60 (Deg. and Decimal minutes)
Long. 116 ° 56.644 (Deg. and Decimal minutes)
Address of Well Site TBA Airport & Caddy
City Weiser

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

Seal material	From (ft)	To (ft)	Quantity (lbs or ft)	Placement method/procedure
<u>3/8 Bent.</u>	<u>0</u>	<u>22</u>	<u>1400 lb</u>	<u>pour & pull</u>
				<u>16" Temp</u>

Diameter (nominal)	From (ft)	To (ft)	Gauge/Schedule	Material	Casing	Liner	Threaded	Welded
<u>12.75</u>	<u>1.5</u>	<u>32.10</u>	<u>250</u>	<u>Steel</u>	☒	☐	☐	☒
<u>12.75</u>	<u>43.2</u>	<u>45.10</u>	<u>250</u>	<u>Steel</u>	☒	☐	☐	☒
<u>12.75</u>	<u>51.2</u>	<u>54.5</u>	<u>250</u>	<u>Steel</u>	☒	☐	☐	☒

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

9. PERFORATIONS/SCREENS:
Perforations ☐ Y ☒ N Method _____
Manufactured screen ☒ Y ☐ N Type ST. ST. wire wrap
Method of installation set & pull back Temp 16"

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule
<u>32.10</u>	<u>43.2</u>	<u>.030</u>		<u>12.7</u>	<u>ST. ST.</u>	
<u>45.10</u>	<u>51.2</u>	<u>.030</u>		<u>12.7</u>	<u>ST. ST.</u>	

Length of Headpipe _____ Length of Tailpipe 3' 3"

Packer ☐ Y ☒ N Type _____

Filter Material	From (ft)	To (ft)	Quantity (lbs or ft)	Placement method
<u>8-12</u>	<u>44</u>	<u>54</u>	<u>750 lbs</u>	<u>pour &</u>
				<u>pour & pull</u>

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) 29 Static water level (ft) 19
Water temp. (°F) 65 Bottom hole temp. (°F) 65
Describe access port _____

Well test:			Test method:			
Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)	Pump	Bailer	Air	Flowing artesian
32	150 ±	360	☐	☐	☒	☐

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
<u>18</u>	<u>0</u>	<u>12</u>	<u>Clay - Soil</u>	<u>2</u>
<u>18</u>	<u>12</u>	<u>18</u>	<u>Hard Sandy Clay</u>	<u>2</u>
<u>16</u>	<u>18</u>	<u>43</u>	<u>Sand & gravel</u>	<u>2</u>
<u>16</u>	<u>43</u>	<u>46</u>	<u>Gravel & mud sand</u>	<u>3</u>
<u>15</u>	<u>46</u>	<u>51</u>	<u>Gravel (P&S)</u>	<u>2</u>
<u>15</u>	<u>51</u>	<u>56</u>	<u>Blue Clay</u>	<u>2</u>

Completed Depth (Measurable): 54' 5"
Date Started: 4-20-13 Date Completed: 5-8-13

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 Robert Dawson Inc. Co. No. 589
Principal Driller R. Dawson Date 5-14-13
Driller _____ Date _____
Operator II _____ Date _____
Operator I _____ Date _____
* Signature of Principal Driller and rig operator are required.

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WATER RESOURCES
WESTERN REGION

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

IDWR

1. WELL TAG NO. D 0069055

Drilling Permit No. 908924-874981
Water right or injection well # 67-15040

2. OWNER:

Name Janine L. & Randy L. Smith
Address 1587 Loafer Lane
City Weiser State Idaho Zip 83672

3. WELL LOCATION:

Twp. 10 North ☒ or South ☐ Rge. 5 East ☐ or West ☒
Sec. 9 1/4 SE 1/4 SW 1/4Gov't Lot _____ County Washington
Lat. 44 ° 12.602 (Deg. and Decimal minutes)
Long 116 ° 56.757 (Deg. and Decimal minutes)
Address of Well Site TBA Airport and Clabby RoadCity Weiser
(Give at least name of road - distance to road or landmark)
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)	Placement method/procedure
Bent. Chips	0	18-8	700 Lbs.	Pour & Pull Temp 12"
Bent. Chips	38	71-6	900 Lbs.	Pour & Tag

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/Schedule	Material	Casing Liner	Threaded	Welded
8.6	1'-1"	20	.250	Steel	☒	☐	☒
8.6	20	35		St. Screens	☐	☐	☒
8.6	35	38	.250	Steel	☒	☐	☒
					☐	☐	☐

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

9. PERFORATIONS/SCREENS:

Perforations ☐ Y ☒ N Method _____Manufactured screen ☒ Y ☐ N Type Cont. WoundMethod of installation Set on Bottom and Pull back Temp. 10"

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule
20	25-3	.020		8.6	St. St.	
25-3	35-3	.035		8.6	St. St.	

Length of Headpipe 20 ft. Casing Length of Tailpipe 3 ft. CasingPacker ☐ Y ☒ N Type _____

10. FILTER PACK:

Filter Material	From (ft)	To (ft)	Quantity (lbs or ft)	Placement method
6-9	18'-8"	22'-6"	750 Lbs.	Pour & Tag
			(15 Bags)	

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) 20 Static water level (ft) 20
Water temp. (°F) < 65 Bottom hole temp. (°F) < 65

Describe access port _____

Well test:

Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)
15	40 +/-	270

Test method:

Pump	Boiler	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
12.75	0	1	Sandy Brown Soil		0
"	1	4	Brown Sandy Clay (fill)		0
"	4	14	Brown Sandy Clay and Onions		0
"	14	19.5	Gravel & Sand		0
10.75	19.5	34.5	Gravel & Sand	x	
"	34.5	39.5	Blue Mudstone		0
8	39.5	50	Blue Mudstone		0
"	50	52	Broken Blue Mudstone	PA	
"	52	71.5	Blue Mudstone		0

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WATER RESOURCES
WESTERN REGIONCompleted Depth (Measurable): 38 FeetDate Started: May 12, 2015Date Completed: May 21, 2015

14. DRILLER'S CERTIFICATION:

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

Company Name Robert Dawson Drilling, Inc. Co. No. 589Principal Driller Robert Dawson Date May 21, 2015

Driller _____ Date _____

Operator II _____ Date _____

Operator I _____ Date _____

* Signature of Principal Driller and rig operator are required



West well

44 12.602 W
116 56.744 N



West well tag
#D0069055



East well

44 12.601 W
116 56.691 N



East well tag
#D0064342



Pressure gauge
on east well reads
72 psi.



Pressure gauge
on mainline reads
~75 psi.



Riser between 2 wells connects to mainline and supplies water to wheel line.



19 acre POU.

Standing at riser/mainline looking north.

Wheel line out in distance across field with 16 sprinkler heads.