

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 67-15050
Exam Date: 6/7/2016

1. Current Owner:
SHELDON LEE ALDER 1555 SUNNYSIDE RD WEISER ID 83672 (208)549-0579 And
DIXIE ALDER 1555 SUNNYSIDE RD WEISER ID 83672 (208)549-0579

2. Accompanied by: Lee Alder
Phone No:
Address:
Relationship to Permit Holder:

3. SOURCE: GROUND WATER TRIBUTARY:

B. OVERLAP REVIEW

1. Other water rights with the same place of use: Lower Payette Ditch Co.
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 NW¼SE¼ Sec. 10, Twp 10N, Rge 05W, B.M. WASHINGTON County

Method of Determination: Garmin GPS collected. Digital PLSS maps referenced.

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	10									16.0					1.0			17.0

Total Acres: 17.0

Method of Determination: ArcMap measurement tools using aerial imagery of irrigated grounds.

3. Delivery System Diagram Attached (required). Indicate all major components and distances between components.
X Indicate weir size/pipe as applicable.

X Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.

X Aerial Photo Attached (required for irrigation of 10+ acres).

X 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
D0060089		10			6" carbon steel pipe

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

D. FLOW MEASUREMENTS

1.

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

2. Measurements: None collected.**E. FLOW CALCULATIONS**

Measured Method:

Additional Computation Sheets Attached

1 handline has 32 sprinkler heads with 9/64" nozzles.

9/64" nozzles delivers 4.18 gpm @ 50 psi.

32 sprinklers * 4.18 gpm = 133.76 gpm = **0.30 cfs**Theoretical:

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

Efficiency = 0.70

Depth to water = 20-30 ft.

psi = 60

hp = 10

Theoretical = **0.38 cfs**

Permit	0.34 cfs
B.U. Standard Allowance	0.34 cfs
B. U. Proof Fee	\$100 → 0.20 to 1.00 cfs
Theoretical Rate	0.38 cfs
Sprinkler Calculation	0.30 cfs
License Recommendation	0.34 cfs

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 6.5 \text{ acres} \times 4.5 \text{ af/ac} = 76.5 \text{ af}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.30 \text{ cfs} \times 260 \text{ days} \times 1.9835 = 154.7 \text{ af}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 76.5 \text{ af}$$

2. Volume Calculations for Other Uses: None.**G. NARRATIVE/REMARKS/COMMENTS**

Field exam was conducted by WRA Patrick Kelly on June 7, 2016. Lee Alder, permit holder of 67-15050 was present during the visit and escorted the agent about the property.

Ownership is accurate as it appears on the permit. Mr. & Mrs. Alder still live at the residence and Washington County taxlot data supports property ownership.

The POD is a well with a driller tag D0060089. A well log report was found associated with the well. A Garmin GPS recorded a position of N 44 12.979 and W 116 55.329. This coincides very close to the location recorded on the drillers report. The well is used for irrigation on the Alder property and does not

serve water for any other purpose. No amendment is required. No POD overlap exists at the time of the exam. The permit included the 10 acre tract legal description. This will be removed at licensing since department standard practices reserve the 10 acre tract for springs.

A total of 17.1 acres is described by the permit. The field outlined by the permit receives water from the well described above through a series of risers and handlines installed on the system. At the time of the exam, the user was irrigating a field in the NWSE QQ where only 1.1 acres are identified by the permit. A recommendation was made to Mr. Alder that if the user irrigates more land than what is described by the permit, than it is my recommendation that he file a new water permit application.

The POU is within the Lower Payette Ditch Co boundaries. Mr. Alder explained that he is unable to have this water delivered to his property at the moment; however he is still paying his assessments for his shares. Condition 104 was issued on the permit which is now condition 105. This condition is usually reserved for supplemental ground water use commonly with conditions 065 and WB7. These two conditions were not applied to the permit however. It seems that the permit was issued to recognize the surface water shares, but not restrict the ground water use to solely supplemental. Standard practice now to use 065 and not 105 since it was applied for and developed as primary use. 104 will be replaced with 065.

Mr. Alder expressed to me the constant need to pump ground water to prevent his basement from flooding.

The POU is accurately described by the permit. No amendment is required. No combined use limits will be added with the irrigation district rights.

According to the application, water is delivered via a 10 hp submersible pump. Information on the pump was not available at the time of the exam. A 6" carbon steel pipe outlet delivers water to a series of risers installed on the system. The water user can only operate one hand line at a time due to a loss of pressure. There are up to 32 sprinklers with 9/64" nozzles on a single hand line in use at one time. The flow calculation above estimates a diversion rate of 0.30 cfs. The theoretical suggests a higher rate and gives the user the full inch to the acre. Since both calculations are within reason of each other, the benefit will fall in favor of the user, and a recommendation is being made for 0.34 cfs.

The permit was issued with a ground water source tributary to the Snake River. There is no hydraulic data that supports water within this area is tributary directly to the Snake River. Without this information, the tributary will be removed at licensing per department policy standards.

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

H. RECOMMENDATIONS

1. Recommended Amounts

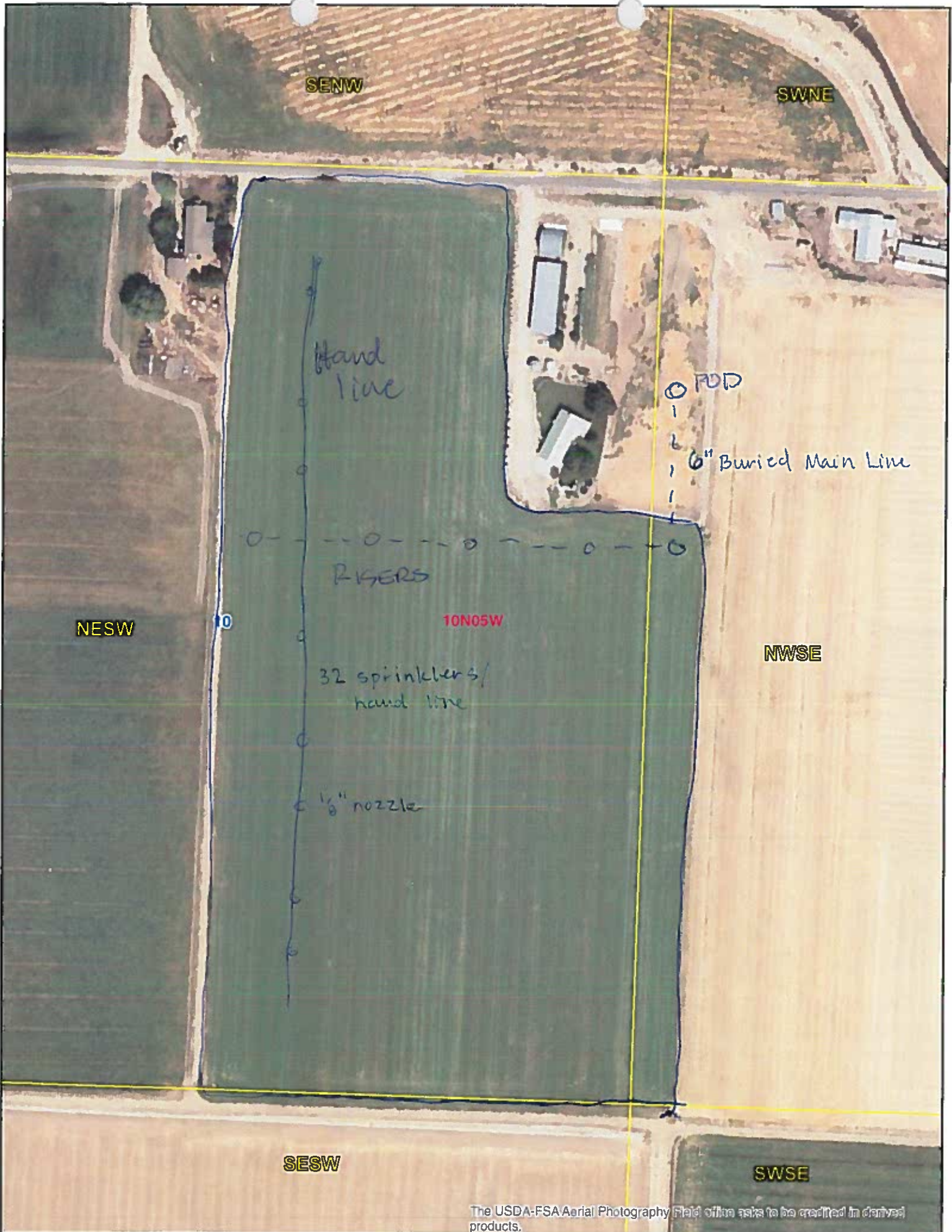
<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	03/01 to 11/15	0.34 CFS	76.5 AF
	<u>Totals:</u>	0.34 CFS	76.5 AF

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 Patricia Welling Date 6-7-2016
 Reviewer _____ Date _____



SENW

SWNE

Hand
line

POD

6" Buried Main Line

RIGERS

NESW

10

10N05W

32 sprinklers/
hand line

1/8" nozzle

NWSE

SESW

SWSE

IDAHO DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

FDWR
861848

1. WELL TAG NO. D DD160089
Drilling Permit No. 913220-861848
Water right or injection well # 67-15050

2. OWNER:
Name Sherman and Dixie Alder
Address 1555 Sunnyside Road
City Weiser State Id Zip 83672

3. WELL LOCATION:
Twp. 10 North ☒ or South ☐ Rge. 5 East ☐ or West ☒
Sec. 10 NW 1/4 NW 1/4 SE 1/4

Gov't Lot _____ County Washington
Lat. 44 ° 12980 (Deg. and Decimal minutes)
Long. 116 ° 55.328 (Deg. and Decimal minutes)
Address of Well Site 1555 Sunnyside Road
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 ³)	Placement method/procedure
Bent chips	0	18	750lbs	pour

Diameter (nominal)	From (ft)	To (ft)	Gauge/Schedule	Material	Casing	Liner	Threaded	Welded
8.625	1.25	30	250	steel	☒	☐	☐	☒

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

9. PERFORATIONS/SCREENS:
Perforations ☐ Y ☐ N Method _____
Manufactured screen ☒ Y ☐ N Type stainless
Method of installation _____

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule
30.5	40.5	.025		6.6	stainless	
40.5	45.5	.030		5.6	stainless	

Length of Headpipe _____ Length of Tailpipe _____
Packer ☐ Y ☒ N Type _____

Filter Material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method
3/8	39	45	250lbs	pour

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) 3 Static water level (ft) 3
Water temp. (°F) 60 Bottom hole temp. (°F) 60
Describe access port _____

Well test:	Discharge or yield (gpm)	Test duration (minutes)	Test method:	Pump	Bater	Air	Flowing artesian
30	150+=	150		☐	☐	☒	☐

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
12.7	0	2.5	dark brown soil		X
12.7	2.5	9	mucky clay	X	
12.7	9	19.5	sloppy sandy clay	X	
12.7	19.5	39	gravel and sand	X	
10	39	45.5	fractured musstone	X	

RECEIVED

OCT 17 2011

WATER RESOURCES
WESTERN REGION

Completed Depth (Measurable) 45.5
Date Started: 8-25-11 Date Completed: 8-28-11

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 Drilling, Inc. Co. No. 589
Principal Driller R. Dawson Date 9-8-11
Driller _____ Date _____
Operator II _____ Date _____
Operator I _____ Date _____

* Signature of Principal Driller and rig operator are required.



Alder Well
located at:

N 44 12.979
W 116 55.329



Drill tag
D0060089



Hand line
being used
with 32
sprinklers
during field
visit.



All sprinklers
are fitted with
9/64" nozzles.



Series of risers
buried within
the POU.



Riser