

STATE OF IDAHO  
DEPARTMENT OF WATER RESOURCES  
BENEFICIAL USE FIELD REPORT

**A. GENERAL INFORMATION**

Permit No: 95-17767  
Exam Date: 08/18/2020

1. Current Owner:  
MARTY EBERLE 9800 N MEYER RD RATHDRUM ID 83858-9406 AND/OR  
PAULETTE EBERLE 9800 N MEYER RD RATHDRUM ID 83858-9406
2. Accompanied by: Marty Eberle  
Phone No: 208-755-2761  
Address: Same as above  
Relationship to permit Holder: Permit Holder

3. **SOURCE:**  
GROUND WATER

Method of Determination: Arcmap and DRG.

**B. OVERLAP REVIEW**

1. Other water rights with the same place of use: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
95-13815	GROUNDWATER	MUNICIPAL	LICENSE

Comments: Right 95-13815 is a municipal right that services the Happy Valley Water System INC; applicant's home is connected for domestic use only to this right.

2. Other water rights with the same point-of-diversion: NO Overlap

Water Right No.	Source	Purpose of Use	Basis

Comments: \_\_\_\_\_

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

GROUND WATER SW¼ SW¼, Sec. 17, Twp 51N, Rge 04W, B.M. KOOTENAI County

Method of Determination: GPS. POD located at -116°52.333, 47°45.645, D0017139.

**PLACE OF USE: IRRIGATION**

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
51N	04W	17											37.0						37.0

Right Acre Limit: 37.0

Total Acres: 37.0

Method of Determination: Field exam and Arcmap.

3. Delivery System Diagram Attached (required). Indicate all major components and distances between components.  
☒ X 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  
☒ X 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
D0017139	UNKOWN	25			

#### D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
GE PANEMETRIC	ULTRASONIC		PT878	PCC1316134		4/2/2019

2. Measurements: flow measurement taken using GE Panemetric Ultrasonic Flowmeter.

#### E. FLOW CALCULATIONS

Measured Method: flow rate determined by GE Panemetric Ultrasonic Flowmeter = **0.44 cfs**

Starting gallons on meter = 12,291.78

Ending gallons on meter = 14,276.785

14,276.785 – 12,291.78 = 1,985 gallons / 10 minutes = 198.5 gpm or 0.44 cfs.

#### F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 37.0 \text{ ac} \times 3.0 \text{ afa} = \mathbf{111.0 \text{ af}}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.44 \text{ cfs} \times 246 \text{ days} \times 1.9835 = 214.7$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 111.0 \text{ af}$$

2. Volume Calculations for Other Uses: N/A

#### G. NARRATIVE/REMARKS/COMMENTS

Field exam conducted on 8/18/2020 with applicant, Marty Eberle, showed water from well D0017139 being used for irrigation purposes. At the POD, applicant had a 25 HP pump that routed direct to a hydrant for direct flow irrigation use. The pump control and piping from well are in a vaulted tank co-located with the well. An adequate surface area of pipe was located near the POD to complete flow measurements using a GE Panemetric Ultrasonic Flowmeter (S/N PCC1316134).

Flowmeter measurements derived the rate of diversion to be **0.44 cfs**, which will be carried forward to licensing.

Applicant had permitted for Domestic and Irrigation components. At time of field exam, applicant's in home domestic use is serviced by the Happy Valley Water System Inc., municipal right 95-13815, and as such the domestic component for this right was removed during licensing review.

Applicant permitted for 37 acres of irrigation. During field exam, the irrigated acreage was sketched out. Year 2019 Arcmap aerial imagery was used to trace out irrigation during licensing review, equaling 37.0 acres; the annual volume for irrigation component equals  $37.0 \text{ ac} \times 3.0 \text{ afa} = 111.0 \text{ af}$ , which will be applied to license. Applicant used a fire hose to hand line to irrigate a portion of his acreage, and operated 4 wheel line irrigation systems for the larger tracts. Applicant alternated wheel lines, running 2ea comprised of 32ea 5/32<sup>nd</sup> nozzles, at one time to irrigate. Active irrigation was observed during flow measurements, and aerial imagery clearly depicts the applicant's irrigated area.

Conditions 046 and 132 were removed from permit during licensing review. All other conditions remain from permit to license. Right 95-13815 overlaps this right's POU, is a municipal right using groundwater from a different well than this right, which services the Happy Valley Water System INC; applicant's home is connected for domestic use only associated with right 95-13815. As such, there is not a concern for overlap between rights, and applicant asserted he would file for new water permit in the future if he chooses to connect to his personal well for domestic use. There are no other overlap concerns for this right.

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

## H. RECOMMENDATIONS

### 1. Recommended Amounts

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Annual Volume</u>
IRRIGATION	03/15 to 11/15	0.44 CFS	111.0 AF
<u>Totals:</u>		0.44 CFS	111.0 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

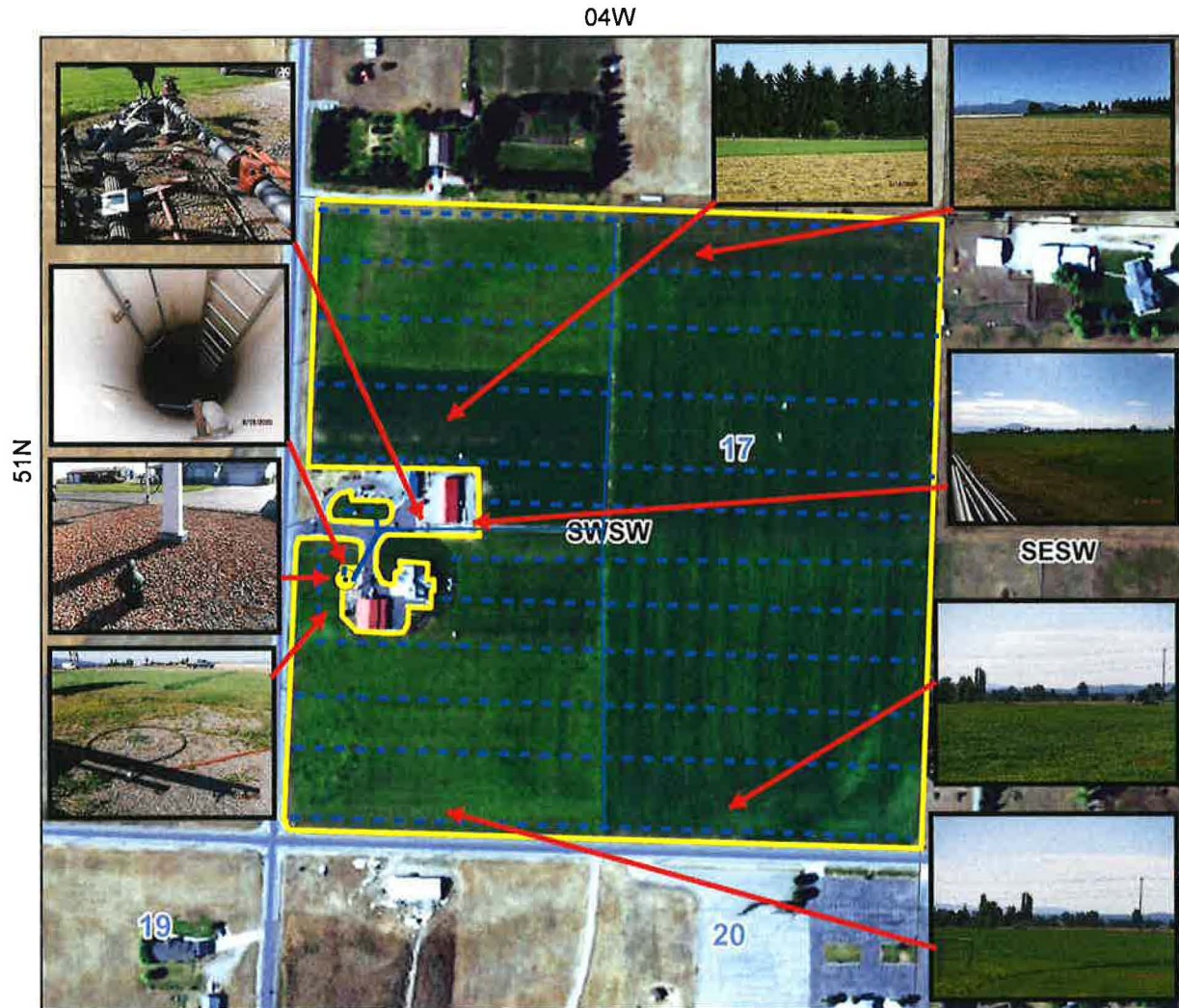
## I. AUTHENTICATION

Luke Bates - Water Resource Agent

Field Examiner's Name SB.D Date 8/26/2020  
 Reviewer Adm Fink Date 8/31/2020

State of Idaho  
Department of Water Resources  
**Attachment to Field Exam**  
95-17767

IRRIGATION system diagram.

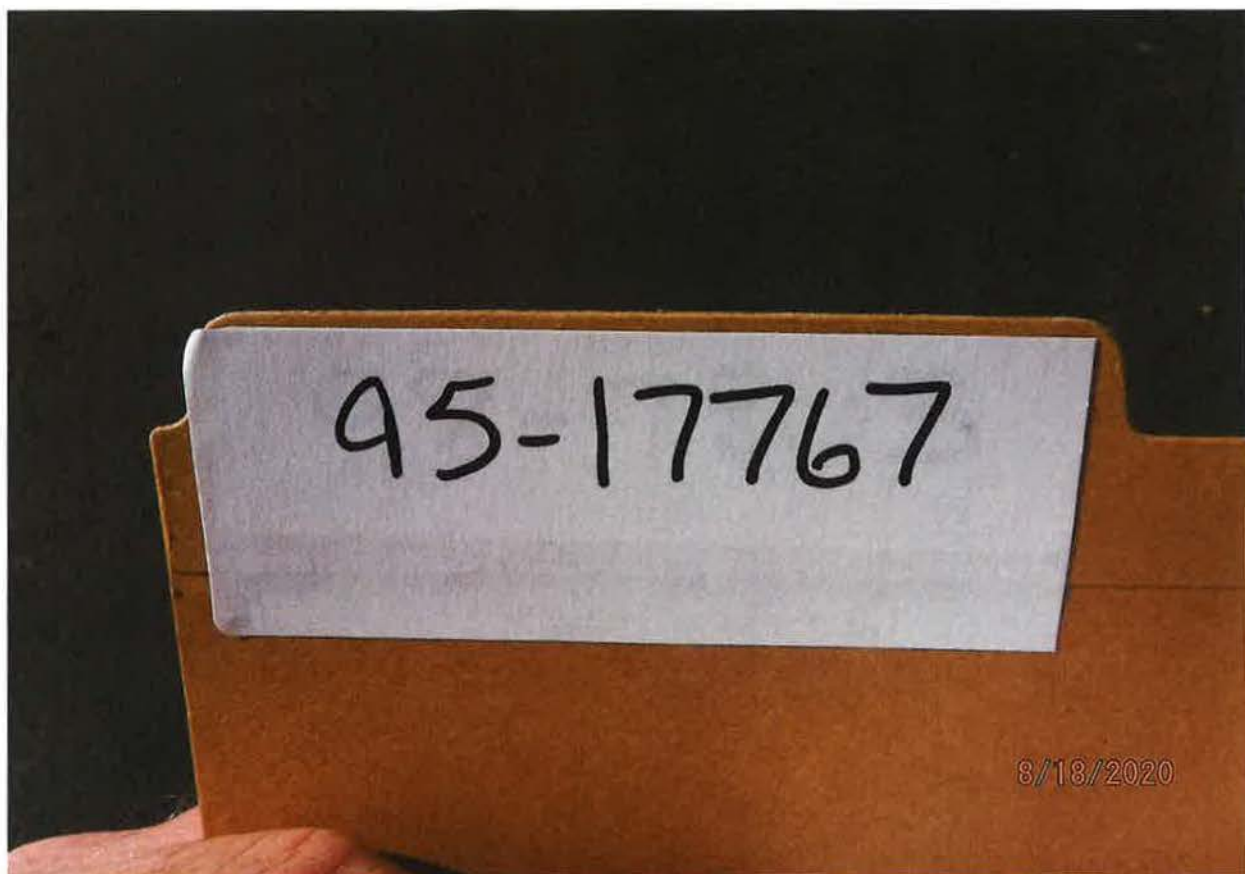


- Point of Diversion
- Place Of Use Boundary
- Townships
- PLS Sections
- Quarter Quarters

0 0.045 0.09 0.18 Miles







POD - WELL D0017139





Vault containing well piping and 25 HP PUMP



WATER CONVEYANCE SYSTEM – FROM WELL TO HYDRANT FOR SPRINKLER MAIN TRUNK LINE





FLOWMETER MEASUREMENT FOR DIVERSION RATE



IRRIGATION POU – HAND LINE SECTION DIRECT FROM WELL





IRRIGATION POU







IRRIGATION POU







IRRIGATION POU



5/32<sup>ND</sup> NOZZLE SPRINKLER – 32EA IN OPERATION AT ONE TIME