

TO: File 75-14265
FROM: Monica Van Bussum
DATE: August 23, 2010
RE: Licensing field exam for 75-14265

This memo serves to document what I observed during a field exam I conducted on Bill Oldham's property in Elk Bend on the Salmon River.

General description

The property is approximately 23 miles south of the town of Salmon and is accessed via the Tower Creek bridge. The property comprises 16 blocks of the neighborhood subdivision. Mr. Oldham's personal house is across the road from the permitted property.



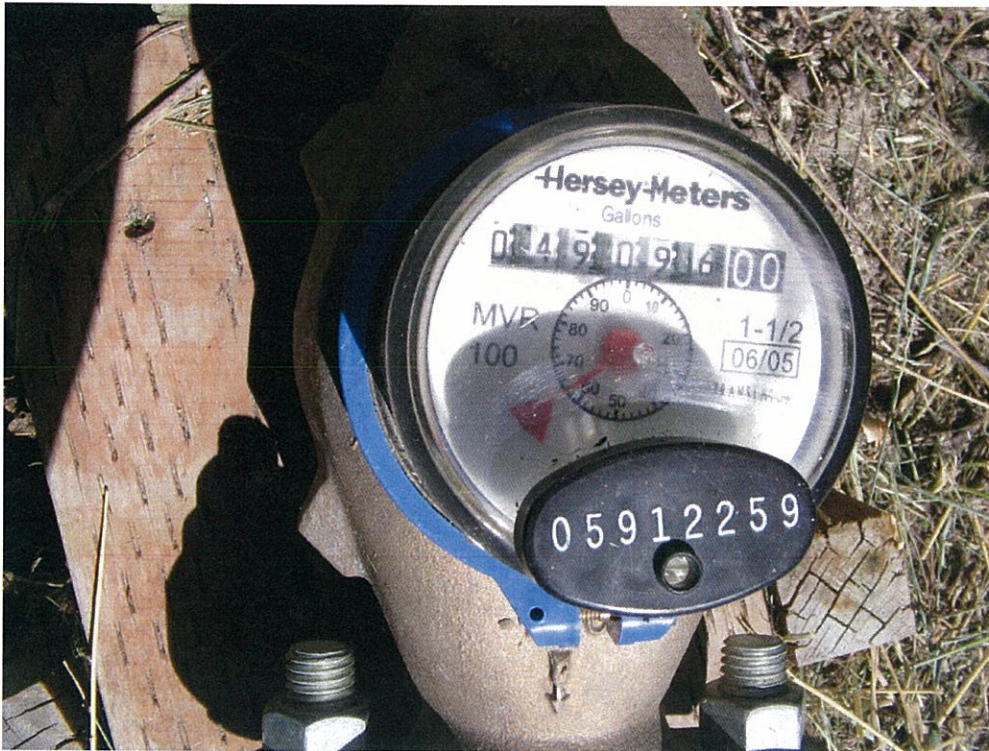
A0017301 (2502202 1519499). Point of diversion. Picture taken looking southwest. The river is available in the background. Pump is a Myers with a 1.5hp GE motor. There is an installed meter shown with a blue arrow. The installation of a measuring device is a condition of the permit, and Mr. Oldham sends regular meter readings.



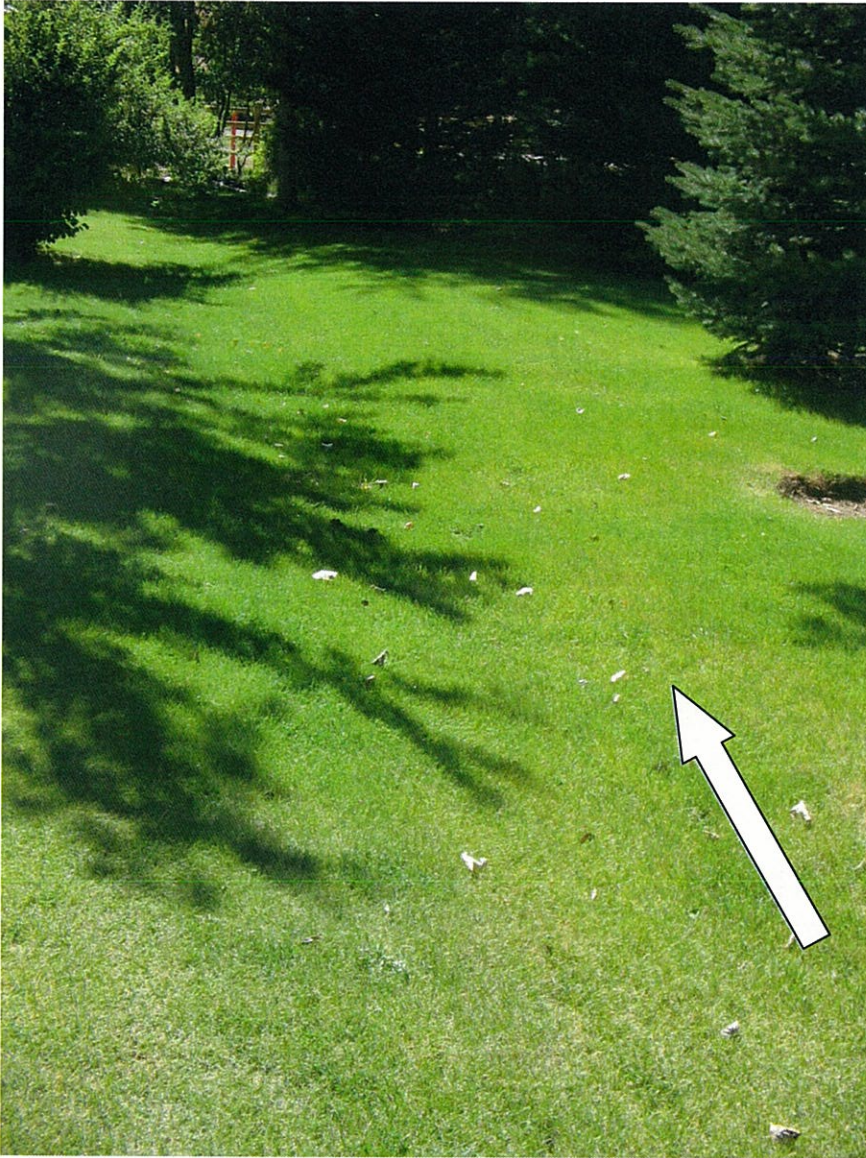
This is the actual intake from the river. The river is flowing from right to left. The intake is shown at the left. A required fish screen is in place. 1.5-inch pipe goes from the intake to the pump and then is throughout the system.



Close-up of the pump apparatus.



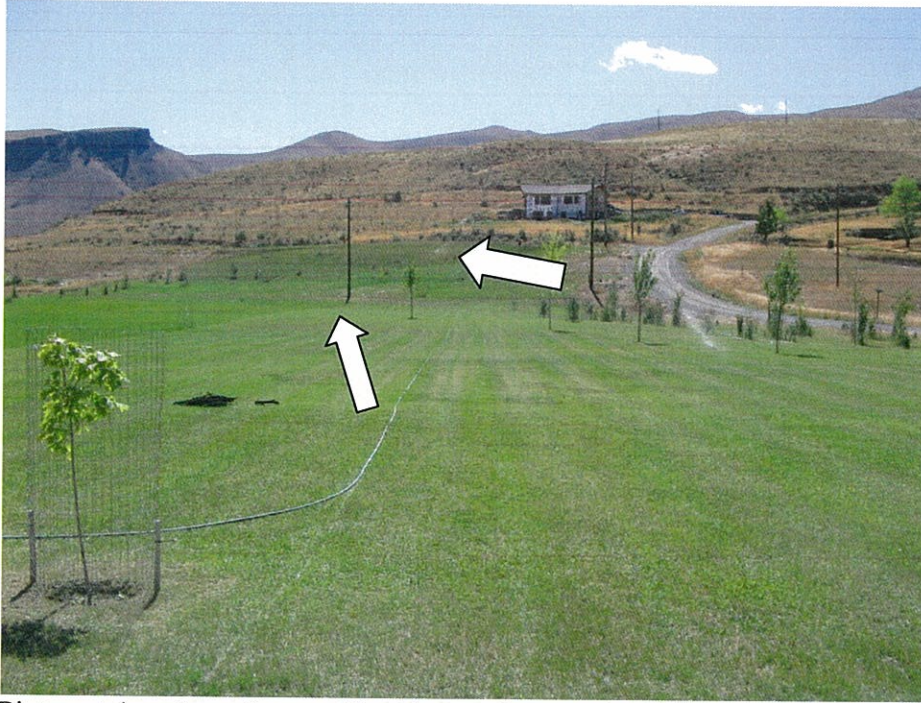
Close-up of the installed measuring device showing 4,909,600 gallons. This is a cumulative meter. I observed the meter go from 4,909,800 to 4,910,000 gallons in ten minutes. This is 100 gallons in 10 minutes, which is 10 gallons per minute observed. This rate powered three Rain Bird sprinklers.



There are about two feet of pipe past the meter that are above ground. Then the pipe goes underground across this field. Flow direction is noted by the white arrow. The arrow is just to the right of the depression in the ground that indicates the pipe's path.



The pipe continues and crosses underneath the road. The fence along the road is clearly visible in the picture background. Flow direction is again noted by the white arrow. The arrow is to the right of the depression marking the path of the pipe.



Picture taken from the road looking at the permitted place of use (POU). The river is behind the photographer. Three Rain Bird sprinklers were operating but only two are clearly visible in this picture, noted by the white arrows.



After it crosses the road, the water can enter the field through one of three outlets such as this. The hoses and Rain Birds are moved from outlet to outlet and moved around within each zone to adequately irrigate the POU.



Picture of one of the Rain Birds in operation.

The next three pictures are a left-to-right view of the irrigated POU taken overlooking the property from its highest vantage point. The river is in the background. The open field is the permitted POU. The land is irrigated grass with a number of native and non-native trees. Rain Birds are visible operating and noted by the white arrows. River flow direction is noted by a blue arrow. Hoses are also clearly visible in several pictures. As mentioned above, the hoses and Rain Birds are moved according to irrigation schedules.





State of Idaho
Department of Water Resources
Water Right License
75-14265
Water Service Area Boundary for Bill Oldham



Legend

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

0 0.04 0.08 0.16 Miles



STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 75-14265

Exam Date:

1. Current Owner: BILL OLDHAM
PO BOX 1427
SALMON ID 83467
(208)894-4520

2. Accompanied by: Bill Oldham

3. SOURCE

SALMON RIVER

TRIBUTARY

SNAKE RIVER

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:

SALMON RIVER

L2 SW1/4NW1/4SW1/4

Sec. 22, Twp 18N, Rge 21E, B.M.

LEMHI County

Method of Determination: GPS; different than permitted; will need amendment

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>	
18N	21E	22							3.0										3.0
									L 2										

Total Acres: 3

Method of Determination: Walk of the property with the permit holder (see attached report with photos)

3. ☐ Delivery System Diagram Attached (required): See attached report with photos.
☐ Map Attached Showing Location(s) of point(s) of diversion and place(s) of use : See attached map.
☐ NA_ Aerial Photo Attached (required for irrigation of 10+ acres):
☐ Photo of Diversion and System Attached

4.

<u>Well or Diversion 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 Size</u>
A0017301	GE	1.5	5KC33PN27038T	Myers	9860503

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

D. FLOW MEASUREMENTS

1.

<u>Measurement Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
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2. Measurements: The diversion apparatus, per the permitting instructions, has a totalizing measuring device. I witnessed 100 gallons go through the system in four minutes, or a flow rate around 0.06 cfs.

E. FLOW CALCULATIONS

☐ Additional Computation Sheets Attached

Measured Method: Theoretical calculations (see attached spreadsheet) indicate ample flow, which supports the measurement.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 2.6 \text{ ac} \times 3.5 \text{ AF/ac/yr} = 10.5 \text{ AFA}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.05 \text{ cfs} \times 214 \text{ days} \times 1.9835 = 21.2 \text{ AFA}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 10.5 \text{ AFA}$$

2. Volume Calculations for Other Uses: NA

G. NARRATIVE/REMARKS/COMMENTS: See attached report.

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	0.060 CFS	10.5 AFA
<u>Totals:</u>		0.060 CFS	10.5 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 _____ Date _____

Reviewer _____ Date _____

THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 75-14265
 Examiner: Monica Van Bussum
 Date of Field Exam: 8/23/2010

P/D No.:	OPTION 1	OPTION 2	OPTION 3
PUMP HORSEPOWER	1.5	0	0
BOOSTER HORSEPOWER	0	0	0
PUMPING LEVEL	100	0	0
DISCHARGE PRESSURE	0	0	0 AVE
RATE OF FLOW (cfs)	0.09	#DIV/0!	#DIV/0!