

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
IN-OFFICE REVIEW/BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATIONPermit No: 74-15665

Exam Date: 02/24/15

1. Does this qualify for an in-office field exam (IDAPA 035.02.r)?
- X
- Y
-
- N

a. Irrigation of 5 acres or less

b. Storage of up to 14.6 AF for stockwater purposes only

c. Any use other than irrigation or storage, if the combined diversion rate is 0.24 cfs or less

d. Other < >

2. Current Owner: Name: Oeding

Owner of Record Correct? X Y NAddress of Record Correct? X Y N

If No: Address

3. Beneficial Use Fees have been paid:
- X
- Y
-
- N Receipt No: C099614

4. **SOURCE****TRIBUTARY**

Lemhi River

Salmon River

Method of Determination: Lemhi River on West end of property boundary per taxlot and GIS imagery.

Change in Source: Y X N**B. OVERLAP REVIEW**

1. Other water rights with the same place of use:
- X
- NO Overlap

Water Right No.	Source	Purpose of Use	Basis

Comments: Eagle Valley Ranch LLC: 74-15609, 74-15610, 74-15611, 74-4029, 74-746A, & 74-746B - Property across Lemhi River (RP21N23E3333001). 74-16016: Clark Family Trust – property to the north of POU (RP21N23E332413).

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

Water Right No.	Source	Purpose of Use	Basis

Comments: No additional PODs in SENW

C. DIVERSION AND DELIVERY SYSTEM1. **LOCATION OF POINT(S) OF DIVERSION:**

Source	Govt. Lot	¼	¼	¼	Sec.	Twp.	Rge.		County
Lemhi River			SE	NW	33	21N	23E	B.M.	Lemhi
								B.M.	

Method of Determination: Application Information. Lemhi River on West end of property boundary per taxlot and GIS imagery.

Change in POD? Y X N Amendment Required? Y X N2. **PLACE OF USE:** 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	
21N	23E	33					2.0												
		Lot #																	
Total Acres =																		2.0	

Method of Determination: GIS Imagery.

Change in POU? ____Y__X__N Amendment Required? ____Y__X__N

__ Delivery System Diagram Attached (required). Indicate all major components and distances between components.

Indicate weir size/pipe as applicable.

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

__ Photo of Diversion and System Attached

4. Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size

*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: < _____ >

E. FLOW CALCULATIONS

____Additional Computation Sheets Attached

Measured Method:

Per App. Processing Memo #17, up to 0.03 cfs/acre for irrigation up to 5 acres acceptable. 2.0 acres(0.03 cfs) = 0.06 cfs

See theoretical pump calc. Sheet. 30 pressure used as 30 psi minimum for impact or gear driven standard nozzles.**Measurement = 0.06 cfs****Permit allowed = 0.04 cfs****License recommend for 0.04 cfs.****F. VOLUME CALCULATIONS**

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = \underline{0.04 \times 3.5} = \underline{0.14}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = \underline{0.04 \times 246 \times 1.9835} = \underline{19.4}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = \underline{0.14}$$

2. Volume Calculations for Other Uses:

G. PURPOSE OF USE

Irrigation __X__Y__N # Stock _____ Domestic # of Homes _____

Other: < >

Change in Purpose of Use? ____Y__N

Method of Determination: GIS Imagery

If Yes: From Use _____ To Use _____ Amount _____ CFS _____ AFA _____

H. NARRATIVE/REMARKS/COMMENTS

- In Wild and Scenic Watershed: Salmon River Excluding Middle Fork
 Season of Use: 03/15-11/15 (246 days)
 Headgate: 3.5
 Cons. Use: 2.5
 Water District 74

Conditions

- Upon specific notification by the Department, the right holder shall install a lockable device, subject to the approval of the Department, in a manner that will provide the watermaster suitable control of the diversion.
- No water shall be diverted under this right after June 15 of each year without prior approval of the Watermaster
- Water shall not be diverted under this right when flows in the Lemhi River are below established minimum flow amounts.
- Diversion of water after June 15 of each year in violation of the conditions of the water right is cause for the director to cancel or revoke this water right.
- Use of water under this right will be regulated by a watermaster with responsibility for the distribution of water among appropriators within a water district. As the time of this approval, this water right is within State Water District No. 74.
- Prior to the diversion and use of water under this approval, the right holder shall comply with all fish screening and/or fish passage requirements of the Idaho Department of Fish and Game.
 - o Per email from D. Nelson dated 12/10/2014 – Not contacting owner regarding fish screen. Will carry condition onto license.

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

I. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
Irrigation	03/15 to 11/15	0.04 CFS	N/A AF
<u>Totals:</u>		0.04 CFS	N/A AF
Exempt: IDAPA 37.03.02 j viii			

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

Other: < >

J. AUTHENTICATION

Field Examiner's Name David A. Nelson Date 02/24/15

Reviewer David A. Nelson Date 2-26-15

THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 74-15665
 Reviewer: D. Favreau
 Date of Review: 2/24/2015

P/D No.:	Senerio 1	Senerio 2	Senerio 3
PUMP HORSEPOWER	0.5	0.5	0.5
BOOSTER HORSEPOWER	0	0	0
PUMPING LEVEL	10	10	10
DISCHARGE PRESSURE	30	40	50
RATE OF FLOW (cfs)	0.04 17	0.03 13	0.02 11
			0.03 13.98

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:

The horspower as indicated on appliation. The pressure was estimated by using the standard for pressure tank turn on and shut off of 30 to 50 psi. The lift was estimated using the maximum deliniation between the topo map's elevation lines .

HUNTER OR NELSON POP-UP TYPE - IMPACT OR GEAR DRIVEN

Performance Data Standard Nozzles - 25-Degree Trajectory

Nozzle Number	PSI	Radius	GPM	Nozzle Number	PSI	Radius	GPM
 1	30	28'	.5	 7	30	36'	2.6
	40	29'	.6		40	40'	3.0
	50	29'	.7		50	42'	3.4
	60	30'	.8		60	42'	3.7
 2	30	29'	.7	 8	30	37'	3.2
	40	30'	.8		40	40'	3.7
	50	30'	.9		50	43'	4.2
	60	31'	1.0		60	44'	4.6
 3	30	30'	.9	 9	30	38'	4.2
	40	31'	1.0		40	43'	4.9
	50	31'	1.2		50	46'	5.5
	60	32'	1.3		60	47'	6.0
 4	30	32'	1.2	 10	40	45'	6.0
	40	33'	1.4		50	48'	6.8
	50	34'	1.6		60	49'	7.6
	60	34'	1.8		70	51'	8.2
 5	30	34'	1.6	 11	40	46'	8.0
	40	36'	1.8		50	48'	8.9
	50	38'	2.0		60	50'	9.8
	60	38'	2.2		70	51'	10.5
 6	30	36'	2.0	 12	40	46'	11.4
	40	38'	2.4		50	48'	12.2
	50	40'	2.7		60	50'	13.2
	60	40'	2.9		70	52'	14.4

Data represents test results in zero wind. Adjust for local conditions.
Optimum distribution efficiency is at 50 PSI.
Radius can be reduced by up to 30% with nozzle retaining screw.

Low Angle Nozzles - 13-Degree Trajectory

Nozzle Number	PSI	Radius	GPM	Nozzle Number	PSI	Radius	GPM
 4	30	22'	1.4	 8	30	31'	3.4
	40	24'	1.7		40	34'	3.9
	50	26'	1.8		50	37'	4.4
	60	28'	2.0		60	38'	4.7
 5	30	25'	1.6	 9	30	33'	4.3
	40	27'	1.9		40	37'	5.0
	50	28'	2.1		50	40'	5.6
	60	30'	2.3		60	42'	6.1
 6	30	27'	2.1	 10	40	38'	6.5
	40	30'	2.5		50	40'	7.3
	50	33'	2.8		60	42'	8.0
	60	35'	3.0		70	44'	8.6
 7	30	29'	2.8	 P	Blank nozzle plug for turning off selected sprinklers during repairs, maintenance, etc.		
	40	32'	3.1				
	50	35'	3.5				
	60	37'	3.8				

Data represents test results in zero wind. Adjust for local conditions.
Optimum distribution efficiency is at 50 PSI.
Radius can be reduced by up to 30% with nozzle retaining screw.

Matched Precipitation GPM at 50 PSI

Square Spacing	90° Nozzle No.	90° GPM	180° Nozzle No.	180° GPM	360° Nozzle No.	360° GPM
25'	1	.7	3	1.2	6	2.7
30'	2	.9	5	2.0	8	4.2
35'	3	1.2	6	2.7	9	5.5
40'	4	1.6	7	3.4	10	6.8
45'	5	2.0	8	4.2	11	8.9

When the arc/nozzle combinations are spaced as indicated, the precipitation rate will be approximately .4"/hr. at 50 PSI.

[illegible]

Water Right	74-15880	N	HILGENDORF, JOHN E; HILGENDORF, REBECCA J	LEMHI RIVER	POD		X			0
Water Right	74-15881	N	HILGENDORF, JOHN E; HILGENDORF, REBECCA J	LEMHI RIVER	POD		X			0
Water Right	74-15882	N	MARSHAK, DOUGLAS	LEMHI RIVER	POD		X			0
Water Right	74-15961	N	MARSHAK, DOUGLAS	LEMHI RIVER	POD		X			0
Water Right	74-15995	N	YOUNG, HARVEY J B; YOUNG, SUSANNE S	LEMHI RIVER	POD		X			0
Water Permit	74-16016	N	THE CLARK FAMILY TRUST	LEMHI RIVER	POD	X				0
Water Permit	74-16016	N	THE CLARK FAMILY TRUST	LEMHI RIVER	POU	X				0
Water Right	74-1683	N	STATE OF IDAHO	LEMHI RIVER	POD		X			0
Water Right	74-1684	N	STATE OF IDAHO	LEMHI RIVER	POD				X	0
Water Right	74-1684	N	STATE OF IDAHO	LEMHI RIVER	POU				X	0
Water Right	74-1812	N	EAGLE VALLEY RANCH LLC	GROUND WATER	POD				X	0
Water Right	74-1812	N	EAGLE VALLEY RANCH LLC	GROUND WATER	POU				X	0
Water Right	74-1813	N	EAGLE VALLEY RANCH LLC	GROUND WATER	POD				X	0
Water Right	74-1813	N	EAGLE VALLEY RANCH LLC	GROUND WATER	POU				X	0
Water Right	74-1814	N	EAGLE VALLEY RANCH LLC	GROUND WATER	POD				X	0
Water Right	74-1814	N	EAGLE VALLEY RANCH LLC	GROUND WATER	POU				X	0
Water Right	74-1815	N	EAGLE VALLEY RANCH LLC	GROUND WATER	POD				X	0
Water Right	74-1815	N	EAGLE VALLEY RANCH LLC	GROUND WATER	POU				X	0
Water Right	74-1835	N	LAMAR COCKRELL & SONS LLC	LEMHI RIVER	POD		X			0
Adjudication Recommendation	74-1835		COCKRELL, KESTER L; COCKRELL, MONA J	LEMHI RIVER	POD		X			0
Water Right	74-2047B	N	BONUCCELLI, ROBERT A	LEMHI RIVER	POD		X			0
Water Right	74-2047D	N	JOLLEY, E DALE; JOLLEY, MILDRED H	LEMHI RIVER	POD		X			0
Water Right	74-2047F	N	SMITH, HELEN	LEMHI RIVER	POD		X			0
Water Right	74-2047G	N	GUTH, BILL; GUTH, PAULA	LEMHI RIVER	POD		X			0
Water Right	74-2047K	N	COCKRELL, BEVERLY; COCKRELL, CHARLES R	LEMHI RIVER	POD		X			0
Water Right	74-2047L	N	COCKRELL, KESTER L; COCKRELL, MONA J	LEMHI RIVER	POD		X			0
Water Right	74-2047M	N	BLODGETT, GEORGE B; BLODGETT, SUSAN H	LEMHI RIVER	POD		X			0

[illegible]