

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

A. GENERAL INFORMATIONPermit No: ~~96-9461~~ 92-10940

Exam Date: 08/22/15

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: Carpenter
- Owner of Record Correct? X Y N
- Address of Record Correct? X Y N
- If No: Address

3. Beneficial Use Fees have been paid: X Y N Receipt No: C100902

4. **SOURCE** TRIBUTARY

St. Joe River

CDA Lake

Method of Determination: Taxlot location

Taxlot data shows carpenter owns lot 62. Taxlot data dated 1/21/14. Tax bill dated 07/30/2014 for lot 63 in name of Carpenter.

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: PIN: RP004500200620A SHADOWY ST JOE LAGOON 1ST ADD LOT 62 & 63.

Taxlots to East of POU: 92-7226 Buell PIN: RP004500200681A, RP004500200700A & RP004500200710A; 92-10440 McCarter PIN: RP004500200732A; 92-10155 Sumner PIN: RP004500200660A

91-7310 Li PIN on claim 46N023W16440HA

City of St. Maries 92-2003, 92-2004, 91-7157, 91-7038, 91-4001, 91-2021 – Municipal rights.

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

Water Right No.	Source	Purpose of Use	Basis

Comments: POD for 92-10940 is a dock diversion for use by property owner. No overlap indicated.

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

Source	Govt. Lot	¼	¼	¼	Sec.	Twp.	Rge.		County
St. Joe River			NE	SW	16	46N	02W	B.M.	Benewah
								B.M.	

Method of Determination: GIS Imagery and application information

Change in POD? Y X N Amendment Required? Y X N

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2. **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	
46N	02W	16									1.0								
		Lot #																	
Total Acres =																			1.0

Method of Determination: GIS Imagery, Taxlot Information, and Application Information. Majority of irrigation in lot 63. Lot 62 0.8 acres, lot 62 0.9 acres.

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. 1.0 acres(0.03 cfs) = 0.03 cfs

Standard pump size of 1HP sufficient for permitted cfs. See Theoretical Sheet

Measurement = 0.03 cfs

Permit allowed = 0.04 cfs

License recommend for 0.03 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 1.0 \times 3.0 = 3.0$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.03 \times 231 \times 1.9835 = 13.7$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 3.0$$

2. Volume Calculations for Other Uses:

License recommend: Exempt: IDAPA 37.03.02(j) (viii)

G. PURPOSE OF USEIrrigation ☒ X ☐ Y ☐ N # Stock _____ Domestic # of Homes _____

Other: < >

Change in Purpose of Use? ☐ Y ☐ N

Method of Determination: Information provided by permit holder.

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

H. NARRATIVE/REMARKS/COMMENTS

- Season of Use: 03/15-10/31 (231 days)

Headgate: 3.0

Cons. Use: 2.0

MSF

Water District None

Groundwater District None

Conditions

This right does not grant any right-of-way or easement across the land of another.
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This right when combined with all other rights shall provide no more than 3.0 afa per acre at the field headgate for irrigation of the place of use.
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Water shall not be diverted under this right when flows in the St. Joe River are below minimum flow amounts as defined by Right 92-7122.
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SHADOWY ST JOE LAGOON 1ST ADD LOT 62 & 63

Have conditions of permit approval been met? ☒ X 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 10/31	0.04 CFS	N/A AF

<u>Totals:</u>	0.04 CFS	N/A AF
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Exempt: IDAPA 37.03.02(j) (viii)

2. Recommended Amendments☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ X None☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☒ X None

Other: < >

J. AUTHENTICATIONField Examiner's Name Daniel A. Meh Date 08/24/15Reviewer Daniel A. Meh Date 8-25-15

THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 92-10940
 Reviewer: D. Favreau
 Date of Review: 8/22/2015

P/D No.:	Senerio 1	Senerio 2	Senerio 3
PUMP HORSEPOWER	1	1	1
BOOSTER HORSEPOWER	0	0	0
PUMPING LEVEL	50	50	50
DISCHARGE PRESSURE	40	50	60
RATE OF FLOW (cfs)	0.04 19	0.04 17	0.03 15
			0.04 16.93

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 horsepower as indicated on appliation. The pressure was estimated by using the standard for pressure tank turn on and shut off of 40 to 60 psi. The lift was estimated using the maximum deliniation between the topo map's elevation lines along the property.

