

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

A. GENERAL INFORMATION

Permit No: 78-12403

Exam Date: 4/17/2014

1. Does this qualify for an in-office field exam (IDAPA 035.02.r)? ☒ Yes ☐ No
- Irrigation of 5 acres or less
 - Storage of up to 14.6 AF for stockwater purposes only
 - Any use other than irrigation or storage, if the combined diversion rate is 0.24 cfs or less
 - Other < >

2. Current Owner: Name: Georgia Sorenson & Brenda Weddie
Owner of Record Correct? ☒ Yes ☐ No
Address of Record Correct? ☒ Yes ☐ No
If No: Address

3. Beneficial Use Fees have been paid: ☒ Yes ☐ No Receipt No: CO98337

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

Little Salmon River

Method of Determination: Applicant submitted an aerial photo map that outlined POD & POU.

Change in Source: ☐ Yes ☒ No**B. OVERLAP REVIEW**

1. Other water rights with the same place of use: Overlap? ☐ Yes ☒ No

Water Right No.	Source	Purpose of Use	Basis

Comments: There are no other water rights that share POU.

2. Other water rights with the same point of diversion: Overlap? ☐ Yes ☒ No

Water Right No.	Source	Purpose of Use	Basis

Comments: There are no other water rights that share POD.

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

Source	Govt. Lot	¼	¼	¼	Sec.	Twp.	Rge.	County
Little Salmon River			NE	SW	22	22N	01E	Adams

Method of Determination: Legal Description in permit validated by PLS data and mapping.

Change in POD? ☐ Yes ☒ NoAmendment Required? ☐ Yes ☒ No

2. **PLACE OF USE:** Use: Domestic & 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	
22N	01E	22									X								

Method of Determination: Map of property submitted by land owner identifies POU clearly. PLSS data through ArcMap match.

Change in POU? ☐ Yes ☒ No Amendment Required? ☐ Yes ☒ No☐ 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
Surface Pump	Unk	5.5	Unk	Unk	Unk

*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: In-office field exam so theoretical not applicable.**E. FLOW CALCULATIONS**☒ Additional Computation Sheets Attached

Measured Method:

Administrator memo #22 authorizes a flow rate of 0.04 cfs.

See the theoretical calculation sheet with a number of scenarios providing a calculated average flow rate of 0.10 cfs.

Measurement = 0.10 cfs**Permit allowed = 0.04 cfs****License recommend for 0.04 cfs.****F. VOLUME CALCULATIONS**

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = \underline{\hspace{2cm}}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = \underline{\hspace{2cm}}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = \underline{\hspace{2cm}}$$

2. Volume Calculations for Other Uses:
Condition limits user to less than 13,000 gpd.

G. PURPOSE OF USE

Irrigation ☒ Yes ☐ No # Stock 0 Domestic # of Homes 1

Other: < >

Change in Purpose of Use? ☐ Yes ☒ No

Method of Determination: Information in the water right file is consistent with aerial photography of the property.

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

H. NARRATIVE/REMARKS/COMMENTS

Permit 78-12403 authorized the use of 0.04 cfs from the Little Salmon River for domestic water purposes. Based on the information provided in the water right file, this qualifies for an in-office field exam.

The pumping level was estimated using topographic maps of the property. This can be safely assumed as 30 feet. Pump horsepower was taken from the pump description that was included in the application. This is a 5.5 hp pump that is fuel powered. When doing my theoretical calculation, I lessened the efficiency down to 30% to account for the gas powered system. Even with the lower efficiency, the average flow rate was 0.10 cfs and should easily supply the property with the water authorized by the permit.

Place of use comparison showed a number of water right users in the area. All of them were neighbors mostly for domestic use of their homes along the river. There was no overlap found.

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>
Domestic	01/01 – 12/31	0.04 cfs	
	<u>Totals</u>	0.04 cfs	

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 Patricia M. Kelly Date 04/17/2014

Reviewer Daniel A. Nelson Date 4-21-14

State of Idaho
Department of Water Resources
Field Exam Map
78-12403

This map depicts the DOMESTIC place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.

01E



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

0 0.0275 0.055 0.11 Miles



THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 78-12403
 Reviewer: Patrick Kelly
 Date of Review: 4/17/2014

P/D No.:	Senerio 1	Senerio 2	Senerio 3
PUMP HORSEPOWER	5.5	5.5	5.5
BOOSTER HORSEPOWER	0	0	0
PUMPING LEVEL	30	30	30
DISCHARGE PRESSURE	40	50	60
RATE OF FLOW (cfs)	0.12	0.10	0.09 0.10

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

Assumptions: %30 efficiency.
 No Friction

Examiners Notes:

Lift was taken from DRG topo map to measure the point of diversion to the place of use or storage tank. Used 40-60 pressure using standard domestic pressure systems. I used a lower efficiency rating of 30% since this is a gas powered pump. Average rate of flow is 0.10 cfs. This represents that the permitted 0.04cfs is capable of being supplied to the property.

Process	Basin Sequence	Draft	Owner	Source	POD/POU	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE	Total Acres
Water Right	78-10021	N	JARAMILLO, MOSES	SPRINGS	POD							X			X							0
Water Right	78-10021	N	JARAMILLO, MOSES	SPRINGS	POU								X									0
Water Right	78-10103	N	FALL CREEK MOUNTAIN RANCH INC	GROUND WATER	POD					X												0
Water Right	78-10103	N	FALL CREEK MOUNTAIN RANCH INC	GROUND WATER	POU					X												0
Water Right	78-10184	N	LITTLE SALMON	GROUND WATER	POD									X								0
Water Right	78-10184	N	LITTLE SALMON	GROUND WATER	POU									X								0
Water Right	78-10249	N	MC DONOUGH, LEROY; MC DONOUGH, LINDA	GROUND WATER	POD												X					0
Water Right	78-10249	N	MC DONOUGH, LEROY; MC DONOUGH, LINDA	GROUND WATER	POU												X					0
Water Right	78-10250	N	LEAVITT, ELLA	GROUND WATER	POD					X												0
Water Right	78-10250	N	LEAVITT, ELLA	GROUND WATER	POU					X												0
Water Right	78-10260	N	FALL CREEK MOUNTAIN RANCH INC	SPRING	POD										X							0
Water Right	78-10378	N	CHAPPLE, KRISTY L; CHAPPLE, RUSSELL D	GROUND WATER	POD									X								0
Water Right	78-10378	N	CHAPPLE, KRISTY L; CHAPPLE, RUSSELL D	GROUND WATER	POU									X								0
Water Right	78-10994	N	UNITED STATES OF AMERICA ACTING	SPRING	POD										X							0
Water Right	78-10994	N	UNITED STATES OF AMERICA ACTING	SPRING	POU										X							0
Water Right	78-12171	N	FALL CREEK MOUNTAIN RANCH INC	GROUND WATER	POD					X												0
Water Right	78-12171	N	FALL CREEK MOUNTAIN RANCH INC	GROUND WATER	POU					X												0
Water Right	78-12172	N	BAUMGARTEN, EARL A; BAUMGARTEN, JANET A	GROUND WATER	POD					X												0
Water Right	78-12172	N	BAUMGARTEN, EARL A; BAUMGARTEN, JANET A	GROUND WATER	POU					X												0
Water Right	78-12173	N	FALL CREEK MOUNTAIN RANCH INC	UNNAMED STREAM	POU					1.6												1.6
Water Right	78-12314	N	MATHER, FRANKLIN	FALL CREEK	POD												X					0
Water Right	78-12314	N	MATHER, FRANKLIN	FALL CREEK	POU									1.0								1
Water Right	78-12322	N	BAUMGARTEN, EARL A; BAUMGARTEN, JANET A	UNNAMED STREAM	POU					2.0												2
Water Permit	78-12403	N	SORENSEN, GEORGIA; WEDDE, BRENDA	LITTLE SALMON RIVER	POD									X								0
Water Permit	78-12403	N	SORENSEN, GEORGIA; WEDDE, BRENDA	LITTLE SALMON RIVER	POU									X								0
Water Right	78-2067	N	WALKER, DON E; WALKER, MARY F	SPRING	POD												X					0
Water Right	78-2067	N	WALKER, DON E; WALKER, MARY F	SPRING	POU												X					0
Water Right	78-255	N	DICKEY, SUSAN A	UNNAMED STREAM	POU					X	X	X	X									0
Water Right	78-4002B	N	J W WHITMAN INC	ELK CREEK	POU													26.0		3.0	40.0	69
Water Right	78-4002B	N	J W WHITMAN INC	ELK CREEK	POU													X			X	0

Neighbor property
to the North.

irrigates on West side
of highway.

Water Right	78-4032	N	SEELY, PRESTON; WATSON, JAMES F.	SPRING	POD					X								0
Water Right	78-4032	N	SEELY, PRESTON; WATSON, JAMES F.	SPRING	POU					X								0
Water Right	78-4122	N	WEBER, BONNIE; WEBER, ED	GROUND WATER	POD					X								0
Water Right	78-4122	N	WEBER, BONNIE; WEBER, ED	GROUND WATER	POU					X								0
Water Right	78-4175	N	HENDERSON, IVA J; HENDERSON, RICHARD A	UNNAMED STREAM	POD					x								0
Water Right	78-4175	N	HENDERSON, IVA J; HENDERSON, RICHARD A	UNNAMED STREAM	POU					x								0
Water Right	78-7030	N	JOHNSON, CHARLES; JOHNSON, LYDIA	SPRING	POD					X								0
Water Right	78-7030	N	JOHNSON, CHARLES; JOHNSON, LYDIA	SPRING	POU					X								0
Water Right	78-7086	N	PULLEN, BOBBE; PULLEN, DICK	FALL CREEK, UNNAMED STREAM	POD									X				0
Water Right	78-7143	N	WILLMAN, GARY	GROUND WATER	POD				X									0
Water Right	78-7143	N	WILLMAN, GARY	GROUND WATER	POU				X									0
Water Right	78-7335	N	SHUBIN, PETER H; SHUBIN, RUTH	LITTLE SALMON RIVER	POD					x								0
Water Right	78-7335	N	SHUBIN, PETER H; SHUBIN, RUTH	LITTLE SALMON RIVER	POU					x								0
Water Right	78-7367	N	HENDERSON, RICHARD A	SPRING	POD					X								0
Water Right	78-7367	N	HENDERSON, RICHARD A	SPRING	POU					X								0

property west side
of highway.

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SA 36 Hwy 95.
Neighbor.

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