

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

A. GENERAL INFORMATIONPermit No: 75-7602

Exam Date: 07/31/13

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: Robert Deurloo

Owner of Record Correct? X Y N

Address of Record Correct? Y X N

If No: Address: 11 Deurloo Lane, Salmon ID 83467

3. Beneficial Use Fees have been paid: X Y N Receipt No: GW for 0.04 cfs, no fee due

4. **SOURCE**

TRIBUTARY

Groundwater

Method of Determination: Information provided by permit holder.

Change in Source: Y X N

B. OVERLAP REVIEW

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

Water Right No.	Source	Purpose of Use	Basis	Note
75-13967	Salmon River	Irrigation	Decreed	Complete POU overlap.

Comments:

- Rights in SWNWNE of Sec. 19, T21N22E

PIN of POU of interest owned by Deurloo - RP001750000040. 74-10094 is for domestic use for home on POU of 75-7602.

Property adjacent to POU to West: RP00175000003D. 75-39A for RP00175000003D. Property adjacent to POU to North: RP00175000001A. 75-10366 & 75-37A for RP00175000001A

- Rights in NWNWNE of Sec. 19, T21N22E

75-10287 & 75-38A for RP21N22E190610, 75-14238 for RP21N22E190615 or RP21N22E190613, 75-39B & 75-10791 for RP21N22E190611, 75-39C & 75-11605 for 21N22E190614

- Rights in NENWNE of Sec. 19, T21N22E

75-10456 & 75-31B for RP21N22E190602, 75-10537 & 75-31A for RP21N22E190601, 75-13974, 75-10886, & 75-10885 for RP21N22E190609, 75-45A for RP21N22E190612

- Rights in SENWNE of Sec. 19, T21N22E

75-45B for RP21N22E190606, 75-45C for RP21N22E190608, 75-45D & 75-10790 for RP21N22E190607

- 75-10691 GW Domestic – not believed to be same well as POU as SRBA claim was filed by Burke in 1990 and SRBA claim received for 75-10094 was also 1990. Owner of POU 75-7602 (Deurloo) appears to have owned property in 1990.

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

Water Right No.	Source	Purpose of Use	Basis	Note
75-10094	Groundwater	Domestic	Decreed	For home on POU

Comments:

13,000 gal/day limitation on 75-10094.

- Rights in SWNWNE of Sec. 19, T21N22E

75-13967 is for same POU as 75-7602 but source is Salmon River, not GW. 75-10366 for RP00175000001A

- Rights in NWNWNE of Sec. 19, T21N22E

75-14238 for RP21N22E190615, 75-11605 for 21N22E190614, 75-10287 for RP21N22E190610, 75-10791 for RP21N22E190611

- Rights in NENWNE of Sec. 19, T21N22E

75-10456 for RP21N22E190602, 75-10537 for RP21N22E190601, 75-10885 & 75-10886 for RP 21N22E190609,

- Rights in SENWNE of Sec. 19, T21N22E

75-10790 for RP21N22E190607

-75-4503 for wastewater. - 75-10691 GW Domestic – not believed to be same well as POU as SRBA claim was filed by Burke in 1990 and SRBA claim received for 75-10094 was also 1990.

C. DIVERSION AND DELIVERY SYSTEM

1. LOCATION OF POINT(S) OF DIVERSION:

Source	Govt. Lot	¼	¼	¼	Sec.	Twp.	Rge.		County
Groundwater			NW	NE	19	21N	22E	B.M.	Lemhi
								B.M.	

Method of Determination: Information and GPS provided by permit holder.

Change in POD? ___Y___X___N Amendment Required? ___Y___X___N

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	
21N	22E	19					2.3												2.3
		Lot #																	
Total Acres =																			2.3

Method of Determination: Taxlot data and GIS Imagery. 2 large buildings on property. Total taxlot acreage 2.8 acres. PIN RP001750000040

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:

Irrigation:

Per App. Processing Memo #17, up to 0.03 cfs/acre for irrigation up to 5 acres acceptable. 2.3 acres(0.03 cfs) = 0.07 cfs

Capacity: 0.13 cfs - **See attached theoretical spreadsheet.****Measurement = 0.07 cfs****Permit allowed = 0.09 cfs****License recommend for 0.07 cfs Irrigation****F. VOLUME CALCULATIONS**

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 2.3 \times 3.5 = 8.0$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.07 \times 185 \times 1.9835 = 25.7$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 8.0$$

2. Volume Calculations for Other Uses:

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

Other: < >

Change in Purpose of Use? ☐ Y ☒ X ☐ N

Method of Determination: Homes and lawns on 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
- No measurement conditions on permit.
- Season of Use less than Current Standards.
- Headgate = 3.5, Consumptive Use = 2.5.
- Needs combined use limits for both POU overlap surface water right and POD for domestic use.
- Although permit holder was unable to provide pump HP information, I used HP provided in application as per Dan Nelson for Theoretical HP Equation Worksheet.
- Permit condition limits right to 0.02 cfs/acre although permitted amount is 0.03 cfs/acre (0.03cfs/acre * 3 acres = 0.09 cfs). License condition adjusted to 0.03 cfs/acre.

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	04/15 to 10/15	0.07 CFS	8.0 AF
<u>Totals:</u>		0.07 CFS	8.0 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

Other: < >

J. AUTHENTICATION

Field Examiner's Name *Danieli* Date 10/15/13

Reviewer *David A. Nela* Date 10-15-13

THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 75-7602
 Examiner: D. Favreau
 Date of Field Exam: 7/31/2013

P/D No.:	Option 1	OPTION 2	OPTION 3	
PUMP HORSEPOWER	3	3	3	
BOOSTER HORSEPOWER	0	0	0	
PUMPING LEVEL	30	30	30	
DISCHARGE PRESSURE	40	50	60	
FRICTION	0	0	0	
RATE OF FLOW (cfs)	0.15	0.13	0.11	AVE
(gpm)	67.8	57.0	49.2	0.13

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.

Examiners Notes:

Lift was taken from application (well 20 ft deep) plus dynamic lift indicated on proof of beneficial use (10 ft). Hp from application. A standard psi for domestic use of 40 to 60 psi was used to estimate

Application Data OK per Dan Nelson 10/09/13

Process	Basin Sequence	Draft	Owner	Source	POD/ POU	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NW5W	SWSW	SE5W	NE5E	NW5E	SW5E	SE5E	Total Acres	Transfer Table	Transfer Row ID
Water Right	75-10024	N	ROBBINS, PATRICIA; ROBBINS, PHILIP	GROUND WATER	POD													X				0		
Water Right	75-10024	N	ROBBINS, PATRICIA; ROBBINS, PHILIP	GROUND WATER	POU													X				0		
Water Right	75-10060	N	JOHNSON, A ORLO; JOHNSON, BETTY	GROUND WATER	POD				X													0		
Water Right	75-10060	N	JOHNSON, A ORLO; JOHNSON, BETTY	GROUND WATER	POU				X													0		
Water Right	75-10078	N	PATTEE, JOHN R; PATTEE, MARIAN	GROUND WATER	POD	X																0		
Water Right	75-10078	N	PATTEE, JOHN R; PATTEE, MARIAN	GROUND WATER	POU	X																0		
Water Right	75-10094	N	DEURLOO, ROBERT J; MC PHERSON, JOAN L	GROUND WATER	POD		X															0		
Water Right	75-10094	N	DEURLOO, ROBERT J; MC PHERSON, JOAN L	GROUND WATER	POU		X															0		
Water Right	75-10109	N	IRISH, HENRIETTA MARGARET	GROUND WATER	POD															X		0		
Water Right	75-10109	N	IRISH, HENRIETTA MARGARET	GROUND WATER	POU															X		0		
Water Right	75-10134	N	JAKOVAC, FRED	SALMON RIVER	POU			40.0														40		
Water Right	75-10135	N	JAKOVAC, FRED	SALMON RIVER	POU			X														0		
Water Right	75-10187	N	MATTHEWS, FLORENCE	GROUND WATER	POD														X			0		
Water Right	75-10187	N	MATTHEWS, FLORENCE	GROUND WATER	POU														X			0		
Water Right	75-10188	N	MATTHEWS, FLORENCE	GROUND WATER	POD														X			0		
Water Right	75-10188	N	MATTHEWS, FLORENCE	GROUND WATER	POU														X			0		
Water Right	75-10197	N	LOCKES, KENNETH	GROUND WATER	POD															X		0		
Water Right	75-10197	N	LOCKES, KENNETH	GROUND WATER	POU															X		0		
Water Right	75-10287	N	PETERSON, BARBARA C; PETERSON, GRANT A	GROUND WATER	POD		X															0		
Water Right	75-10287	N	PETERSON, BARBARA C; PETERSON, GRANT A	GROUND WATER	POU		X															0		
Water Right	75-10297	N	HOELZLE, CHARLES W	GROUND WATER	POD															X		0		
Water Right	75-10297	N	HOELZLE, CHARLES W	GROUND WATER	POU															X		0		
Water Right	75-10314	N	SELICK, DAVID H	GROUND WATER	POD															X		0		
Water Right	75-10314	N	SELICK, DAVID H	GROUND WATER	POU															X		0		
Water Right	75-10366	N	GOSACK, MICHAEL L	GROUND WATER	POD		X															0		
Water Right	75-10366	N	GOSACK, MICHAEL L	GROUND WATER	POU		X															0		
Water Right	75-10367	N	KOERNER, DELORES A; KOERNER, RUSSELL G	GROUND WATER	POD													X				0		
Water Right	75-10367	N	KOERNER, DELORES A; KOERNER, RUSSELL G	GROUND WATER	POU													X				0		
Water Right	75-10370	N	JAKOVAC, FRED	GROUND WATER	POD			X														0		
Water Right	75-10370	N	JAKOVAC, FRED	GROUND WATER	POU			X														0		
Water Right	75-10373	N	HODGES, PAUL A	GROUND WATER	POD															X		0		
Water Right	75-10373	N	HODGES, PAUL A	GROUND WATER	POU															X		0		
Water Right	75-10378	N	KIRKPATRICK, BEVERLY; KIRKPATRICK, TED	GROUND WATER	POD														X			0		
Water Right	75-10378	N	KIRKPATRICK, BEVERLY; KIRKPATRICK, TED	GROUND WATER	POU														X			0		
Water Right	75-10379	N	KIRKPATRICK, BEVERLY; KIRKPATRICK, TED	GROUND WATER	POD														X			0		
Water Right	75-10379	N	KIRKPATRICK, BEVERLY; KIRKPATRICK, TED	GROUND WATER	POU														X			0		
Water Right	75-10394	N	HELMANDOLLAR, DEAN; HELMANDOLLAR, JULIA	GROUND WATER	POD															X		0		
Water Right	75-10394	N	HELMANDOLLAR, DEAN; HELMANDOLLAR, JULIA	GROUND WATER	POU															X		0		

[illegible]

[illegible]

[illegible]

75-13967

75-7602

Combined
Acres

T21N22E 19 NWNE

Decree Permit
2.5 2.3
2.5 2.3

2.5
2.5

Basin	Sequence	Process	Basis	Status	Priority Date	Diversion Rate	Total Acres
75	13967	Water Right	Decreed	Active	04/01/1894	0.10	2.5
75	7602	Water Permit		Active	4/2/1993	0.07	2.3

Combined use limit =	0.10	2.5
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