

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

A. GENERAL INFORMATION

Permit No: 95-16804

Exam Date: 09-25-14

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: Siverson
- Owner of Record Correct? ☒X ☐Y ☐N
- Address of Record Correct? ☒X ☐Y ☐N
- If No:

3. Beneficial Use Fees have been paid: ☒X ☐Y ☐N Receipt No: C099318

4. SOURCE TRIBUTARY
- Groundwater
- Method of Determination: well log
- 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	Owner
95-7557	Spokane River	Domestic	GFWMSD
95-8613, 95-9082, 95-9531	Ground Water	Municipal	GFWMSD

Comments: 95-7446 – domestic right for taxlot south of POU (50N05W133970), 95-10000 – irr. right for taxlot north of POU (016000010010, DAMERON SUB, LT 1 BK 1). GreenFerry Water and Sewer District (GFWMSD) – domestic and municipal rights for same POU.

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

Water Right No.	Source	Purpose of Use	Basis

Comments: 95-7446 – domestic right for taxlot south of POU (50N05W133970)

C. DIVERSION AND DELIVERY SYSTEM

1. LOCATION OF POINT(S) OF DIVERSION:

Source	Govt. Lot	¼	¼	¼	Sec.	Twp.	Rge.		County
Groundwater			SW	NW	13	50N	05W	B.M.	Kootenai
								B.M.	

Method of Determination: Well log and application information.

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

2. PLACE OF USE: Use: Irrigation

TW P	RGE	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
50N	05W	13																	
		Lot #																	
Total Acres =																			

Method of Determination: GIS imagery. Total taxlot acres owned by permit holder = 10 acres. Significant portion of east side of property is in trees.

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. 0.03 *2 acres = 0.06
3 HP pump is needed to pump 0.06 cfs from 200 ft. 3 HP is a standard domestic well HP.

Permit allowed = 0.06 irrigation
License recommend for 0.06 irrigation.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 2.0 \times 3.0 = 6.0$$
$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.06 \times 246 \times 1.9835 = 29.3$$
$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 6.0 \text{ afa}$$

2. Volume Calculations for Other Uses:

G. PURPOSE OF USE

Irrigation ☒X_____ # Stock_____ Domestic # of Homes _____

Other:

Change in Purpose of Use? _____Y ☒X_____N

Method of Determination: Visible on GIS Imagery.

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

H. NARRATIVE/REMARKS/COMMENTS

Irrigation:
Headgate Requirement: 3.0
Consumptive Use: 2.0
Season of Use: 03/15 to 11/15

Water District: None
Groundwater Management Area: None

Conditions:

004	This right does not grant any right-of-way or easement across the land of another.
R66	This right when combined with all other rights shall provide no more than 0.03 cfs per acre nor more than 3.0 afa per acre at the field headgate for irrigation of the lands above.

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 11/15	0.06 CFS	6.0 AF
<u>Totals:</u>		0.06 CFS	6.0 AF

2. Recommended Amendments

____Change P.D. as reflected above ____Add P.D. as reflected above ☒X None

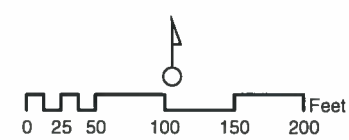
____Change P.U. as reflected above ____Add P.U. as reflected above ☒X None

Other:

J. AUTHENTICATION

Field Examiner's Name Daniel Bro-Turn Date 09/26/14
Reviewer Daniel A. Nelson Date 9-29-14

95-16804



D. Favreau 09/26/14



SENE
14
S0N05W

13
SWNW

NESE

NWSW

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	95-10000	N	THOMAS, PAUL N	SPOKANE RIVER	POU							13.0										13
Adjudication Recommendation	95-11517		TEICH, RICHARD	GROUND WATER	POD	X																0
Adjudication Recommendation	95-11517		TEICH, RICHARD	GROUND WATER	POU	X																0
Adjudication Recommendation	95-12930		BUCK, CHARLES; BUCK, LORAIN	GROUND WATER	POD				X													0
Adjudication Recommendation	95-12930		BUCK, CHARLES; BUCK, LORAIN	GROUND WATER	POU				X													0
Adjudication Recommendation	95-13739		EBHARD, EUGEN B; EBHARD, WILMA	GROUND WATER	POD				X													0
Adjudication Recommendation	95-13739		EBHARD, EUGEN B; EBHARD, WILMA	GROUND WATER	POU				X													0
Water Permit	95-16804	N	SIVERSON, RONALD	GROUND WATER	POD							X										0
Water Permit	95-16804	N	SIVERSON, RONALD	GROUND WATER	POU							2.0										2
Water Right	95-4076	N	STEWART, MERTON H	SPRING	POD					X												0
Water Right	95-4076	N	STEWART, MERTON H	SPRING	POU					14.0												14
Water Right	95-4143	N	CADY, RUFFIE J; CADY, VELMA E	SPRING	POD										X							0
Water Right	95-4143	N	CADY, RUFFIE J; CADY, VELMA E	SPRING	POU										X							0
Water Right	95-4191	N	BARDEN, B K	GROUND WATER	POD											X						0
Water Right	95-4191	N	BARDEN, B K	GROUND WATER	POU											X						0
Water Right	95-7446	N	GEDDES, JAMES MICHAEL	GROUND WATER	POD							X										0
Water Right	95-7446	N	GEDDES, JAMES MICHAEL	GROUND WATER	POU							X										0
Adjudication Recommendation	95-7446		GEDDES, JAMES MICHAEL; GEDDES, SHARON LEE	GROUND WATER	POD							X										0
Adjudication Recommendation	95-7446		GEDDES, JAMES MICHAEL; GEDDES, SHARON LEE	GROUND WATER	POU							X										0
Water Right	95-7557	N	GREENFERRY WATER & SEWER DISTRICT	SPOKANE RIVER	POU	X				X	X	X										0
Adjudication Recommendation	95-8613		GREENFERRY WATER & SEWER DISTRICT	GROUND WATER	POU	X				X	X	X		X		X						0
Water Right	95-9052	N	TANNER, STEPHEN A	GROUND WATER	POD									X								0
Water Right	95-9052	N	TANNER, STEPHEN A	GROUND WATER	POU									X								0
Water Right	95-9082	N	GREENFERRY WATER & SEWER DISTRICT	GROUND WATER	POU	X	X			X	X	X		X		X						0

M	Adjudication Recommendation	95-9082		GREENFERRY WATER & SEWER DISTRICT	GROUND WATER	POU	X		X	X	X		X	X	0
M	Water Permit	95-9531	N	GREENFERRY WATER & SEWER DISTRICT	GROUND WATER	POU	X	X	X	X	X		X	X	0
	Adjudication Recommendation	95-9995		BROWN, PHYLLIS; BROWN, RUSSELL D	GROUND WATER	POD								X	0
	Adjudication Recommendation	95-9995		BROWN, PHYLLIS; BROWN, RUSSELL D	GROUND WATER	POU								X	0
	Water Right	95-9999	N	TRIPLE GRACE INC	SPOKANE RIVER	POU			5.0	28.0					33

THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 95-16804
 Reviewer: D. Favreau
 Date of Review: 9/25/2014

P/D No.:	Senerio 1	Senerio 2	Senerio 3
PUMP HORSEPOWER	3	3	3
BOOSTER HORSEPOWER	0	0	0
PUMPING LEVEL	200	200	200
DISCHARGE PRESSURE	40	50	60
RATE OF FLOW (cfs)	0.06 28	0.06 26	0.05 24
			0.06 26.38

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 was estimated. 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 well log. Well log indicates water from at 15 gpm at 190. 190 + 10 = 200. The pump HP needed to pump the maximum cfs allowed by the permit is 3 HP.