

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

A. GENERAL INFORMATIONPermit No: 94-7759

Exam Date: 02/25/2016

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: Thomson

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

3. Beneficial Use Fees have been paid:
- X
- Y
-
- N Receipt No: N031698

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

CDA River

CDA Lake

Method of Determination: 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: POU PIN: 48N02W133650

94-9334 – PIN 48N02W134150; south of POU; 94-9376 -PIN 04780004001A, south of POU; 94-8287- PIN 48N02W133900, southwest of POU 94-8087 – PIN 04780001001A, south of POU; 94-7413 – PIN 48N02W134025, southwest of taxlot

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

Water Right No.	Source	Purpose of Use	Basis

Comments: 94-8287 – separate dock diversion. 94-8087 – PIN 04780001001A, south of POU; 94-9334 – PIN 48N02W134150; south of POU; 94-9376 -PIN 04780004001A, south of POU; 94-8287- PIN 48N02W133900, southwest of POU; 94-7413 – PIN 48N02W134025, southwest of taxlot

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

Source	Govt. Lot	¼	¼	¼	Sec.	Twp.	Rge.		County
CDA River	3		SE	NW	13	48N	02W	B.M.	Kootenai

Method of Determination: GIS Imagery 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	
48N	02W	13							2.7										2.7
		Lot #							3										
Total Acres =																			2.7

Method of Determination: GIS imagery. Taxlot shape only 4.2 acres. Significant developed driveway.

Use: Stockwater

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	02W	13							X										
		Lot #																	
Total Acres =																			

Method of Determination: Taxlot info.

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. 2.7 acres(0.03 cfs) = 0.08 cfs

No pump info. in file. Standard pump size of 2.0 HP sufficient for permitted cfs. See Theoretical Sheet

Per application Processing Memo #3, 0-10 stock = 0.02 cfs

Permit allowed for 0.15 cfs. Irr., 0.02 cfs stock

License recommend for 0.08 cfs. Irr., 0.02 cfs stock

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 2.7 \times 3.0 = 8.1$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.08 \times 231 \times 1.9835 = 36.6$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 8.1$$

2. Volume Calculations for Other Uses:

Per application Processing Memo #3, 0 - 10 stock = 0.2 afa

Stockwater Volume: 0.2 afa

No irr. volume required: Exempt: IDAPA 37.03.02(j) (viii)

G. PURPOSE OF USE

Irrigation ☒ Y ☐ N # Stock 10 Domestic # of Homes _____

Other: _____

Change in Purpose of Use? ☐ Y ☒ X ☐ N

Method of Determination: 2013 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 10/31

MSF 94-7341

Water District: None, Groundwater Management Area: None

Conditions:

The approach velocity at the point of diversion shall not exceed 0.5 feet per second.

This right does not grant any right-of-way or easement across the land of another.

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 place of use.

Water shall not be diverted under this right when flows in the Coeur d'Alene River are below minimum flow amounts as defined by Right 94-7341. The right holder shall be responsible for monitoring the daily flow of the Coeur d'Alene River using real-time data and shall cease diverting water when flows in the Coeur d'Alene River are below established minimum flow amounts. Unless otherwise specified by the Director of the Department of Water Resources, data from the U.S. Geological Survey Harrison gauging station, No. 12413860, may be used for purposes of determining the daily flow amounts.

A fish screen of 0.25 inch or smaller mesh shall be installed and maintained at the point of diversion.

- 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? ☒ 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	0.08 CFS	N/A - IDAPA 37.03.02(j) (viii)
Stockwater	01/01 to 12/31	0.02 CFS	0.2
<u>Totals:</u>		0.10 CFS	0.2 AFA stockwater

2. Recommended Amendments

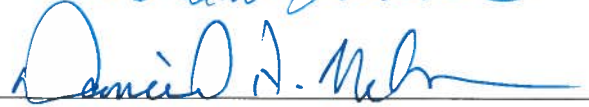
☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ None

☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☒ None

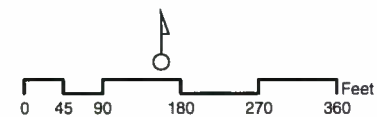
Other:

J. AUTHENTICATION

Field Examiner's Name  Date 02/25/16

Reviewer  Date 2-26-16

94-7759



2015 NAIP

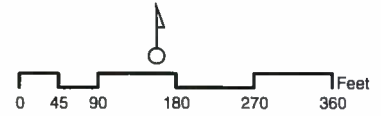
02/25/2016

D. Favreau





94-7759



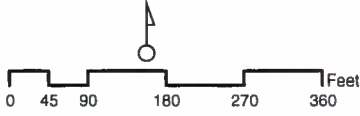
2013 NAIP

02/25/2016

D. Favreau



94-7759



2009 NAIP

02/25/2016

D. Favreau

THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 94-7759
 Reviewer: D. Favreau
 Date of Review: 2/25/2015

P/D No.:	Senerio 1	Senerio 2	Senerio 3
PUMP HORSEPOWER	2	2	2
BOOSTER HORSEPOWER	0	0	0
PUMPING LEVEL	40	40	40
DISCHARGE PRESSURE	40	50	60
RATE OF FLOW (cfs)	0.09 42	0.08 36	0.07 31
			0.08 36.09

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 40 to 60 psi. The lift was estimated using the maximum deliniation between the topo map's elevation lines along the property.