

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

A. GENERAL INFORMATIONPermit No: 95-12609

Exam Date: 09/01/15

1. Does this qualify for an in-office field exam (IDAPA 035.02.r)? X Y N
- 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: Moore
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: N031390

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

CDA Lake

Spokane River

Method of Determination: Taxlot location

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: Taxlots to west of POU: 95-13527 – PIN: 48N04W197315, 95-13023 – PIN: 48N04W197295, 95-13021 – PIN: 48N04W197285, 95-12973 – PIN: 48N04W197200. Taxlots east of POU: 95-13919 & 95-13920 – PIN: 00580000003A, 95-13422 – PIN: 00580000002B, 95-13894 – PIN: 00580000001B, 95-10889 & 95-12295 – PIN: 48N04W203800, 95-12885 – PIN: 084750010040, 95-13724 – PIN: 48N04W204500, 95-4421 – domestic is NWSW, 95-7947 – domestic is NWSW, 95-9017 – PIN: 00580000002D

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

Water Right No.	Source	Purpose of Use	Basis

Comments: Lake diversions appear to be for individual dock pumps. Taxlots to west of POU: 95-13527 – PIN: 48N04W197315, 95-13023 – PIN: 48N04W197295, 95-13021 – PIN: 48N04W197285, 95-12973 – PIN: 48N04W197200

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

Source	Govt. Lot	¼	¼	¼	Sec.	Twp.	Rge.		County
CDA Lake	1		NE	SE	19	48N	04W	B.M.	Kootenai
								B.M.	

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	04W	19													1.2				
		Lot #													1				
48N	04W	20									0.1								
		Lot #									2								
Total Acres =																			1.3

Method of Determination: GIS Imagery, Taxlot Information, and Application Information.

Use: Domestic

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	04W	19													X				
		Lot #													1				

Method of Determination: GIS Imagery, Taxlot Information, and Application Information.

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 Application Processing Memo # 2 – for 1 house served internal use only = 0.02 cfs

Per App. Processing Memo #17, up to 0.03 cfs/acre for irrigation up to 5 acres acceptable. 1.3 acres(0.03 cfs) = 0.04 cfs

No pump info. in file. Standard pump size of 3 HP sufficient for permitted cfs. See Theoretical Sheet

Measurement = 0.04 cfs irr, 0.02 cfs domestic**Permit allowed = 0.05 cfs irr, 0.04 cfs domestic****License recommend for 0.04 cfs irr. 0.02 cfs domestic****F. VOLUME CALCULATIONS**

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 1.3 \times 3.0 = 3.9$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.04 \times 246 \times 1.9835 = 19.5$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 3.9$$

2. Volume Calculations for Other Uses:

Pre field examiners handbook, domestic use for one home internal use only = 0.6 afa

License recommend: 3.9 afa irr and 0.6 afa dom.

G. PURPOSE OF USE

Irrigation ☒ Y ☐ N # Stock _____ Domestic # of Homes 1

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: 03/15-11/15 (246 days)

Headgate: 3.0

Cons. Use: 2.0

Water District None

Groundwater District None

Conditions

1.	004	This right does not grant any right-of-way or easement across the land of another.
2.	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.
3.	X15	A fish screen of 0.25 inch or smaller mesh shall be installed and maintained at the point of diversion.
		Domestic use is for 1 home. Irrigation of lawn, garden and landscaping associated with the home is authorized under the irrigation component of this right.

Per email from D. Nelson dated 12/10/2014 – Not contacting owner regarding fish screen. Will carry conditions onto license.

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>
Irrigation	03/15 to 11/15	0.04 CFS	3.9 AF
Domestic	01/01 to 12/31	0.02 CFS	0.6 AF
<u>Totals:</u>		0.06 CFS	4.5 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  Date 09/03/15

Reviewer  Date 9-3-15



SENE

NWS

95-12609



0 20 40 80 120 160 Feet

D. Favreau 09/03/15

2015 NAIP Prelim.

NESE1 19

48N04W

NWSW.2
20



SENE

NWS

95-12609



0 20 40 80 120 160 Feet

D. Favreau 09/03/15

2013 NAIP

NESE1 19

48W04W

NWSW-2
20

THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 95-12609
 Reviewer: D. Favreau
 Date of Review: 9/3/2015

P/D No.:	Senerio 1	Senerio 2	Senerio 3
PUMP HORSEPOWER	3	3	3
BOOSTER HORSEPOWER	0	0	0
PUMPING LEVEL	80	80	80
DISCHARGE PRESSURE	40	50	60
RATE OF FLOW (cfs)	0.11 48	0.09 42	0.08 38
			0.10 42.82

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.