

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

A. GENERAL INFORMATIONPermit No: 95-16498

Exam Date: 07-03-14

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: Scott MacDonald
 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: C099023

4. SOURCE**TRIBUTARY**

Rathdrum Creek

Sinks

Method of Determination: Application Map.

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
95-14020	Groundwater	Domestic	Recommendation
95-7604	Rathdrum Creek	Irrigation	Right

Comments: 95-7604 is probably for field in SESWNE, where POU for permit is in NWSWNE. There is complete overlap with POU of 95-14020.

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

Water Right No.	Source	Purpose of Use	Basis

Comments: 95-14020 is a ground water right. POD of 95-7604 is not in same QQ as permit.

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

Source	Govt. Lot	¼	¼	¼	Sec.	Twp.	Rge.		County
Rathdrum Creek			SW	NE	30	52N	04W	B.M.	Kootenai
								B.M.	

Method of Determination: Application map

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

2. **PLACE OF USE:** 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	
52N	04W	30			X														
		Lot #																	
Total Acres =																			

Method of Determination: GIS imagery. Taxlot: 52N04W-30-0700

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
	981115	1.5		Utp15p1	

*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:

IDWR Standard per Field Examiners Handbook – Single Family Domestic Home – 0.04 cfs home plus yard.

Per information from permit holder – 1.5 hp pump. Pump can do 0.06 cfs, See attached pump spreadsheet.

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:

IDWR Standard per Field Examiners Handbook – Single Family Domestic Home – home plus yard (< 0.5 acre) – 1.2 AFA**License recommend for 1.2 afa.****- Using condition X35 with 13,000 gal/day condition or equivalent to address combined limit.****No Volume reporting required****G. PURPOSE OF USE**Irrigation N # Stock Domestic # of Homes 1

Other:

Change in Purpose of Use? Y X N

Method of Determination: Home 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: 95C

Groundwater Management Area: Rathdrum Prairie

Conditions:

- Use for one home and no more than 0.5 acre irrigation.
- A fish screen of 0.25 inches or smaller mesh shall be installed and maintained at the POD.
 - o Picture of fish screen provided by permit holder 07/31/14.
- Combined with NIA Recommendation 95-14020 which is a dom. GW right for same home. Requested clarification information from permit holder. Did not receive in information provided 07/31/14. Added condition X35.

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>
Domestic	01/01 to 12/31	0.04 CFS	N/A AF
<u>Totals:</u>		0.04 CFS	N/A 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. AUTHENTICATIONField Examiner's Name David L. Turner Date 08-01-14 Reviewer Daniel A. Meier Date 8-5-14

THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 95-16498
 Reviewer: D. Favreau
 Date of Review: 7/31/2014

P/D No.:	Senerio 1	Senerio 2	Senerio 3
PUMP HORSEPOWER	1.5	1.5	1.5
BOOSTER HORSEPOWER	0	0	0
PUMPING LEVEL	40	40	40
DISCHARGE PRESSURE	40	50	60
RATE OF FLOW (cfs)	0.07 31	0.06 27	0.05 23
			0.06 27.07

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 was supplied by the owner of the system through a picture of the pump. 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. The pump exceeds the maximum allowed by the permit.

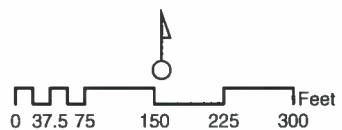
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96-16498



D. Favreau

07/03/14

NENW

NWNE

NENE

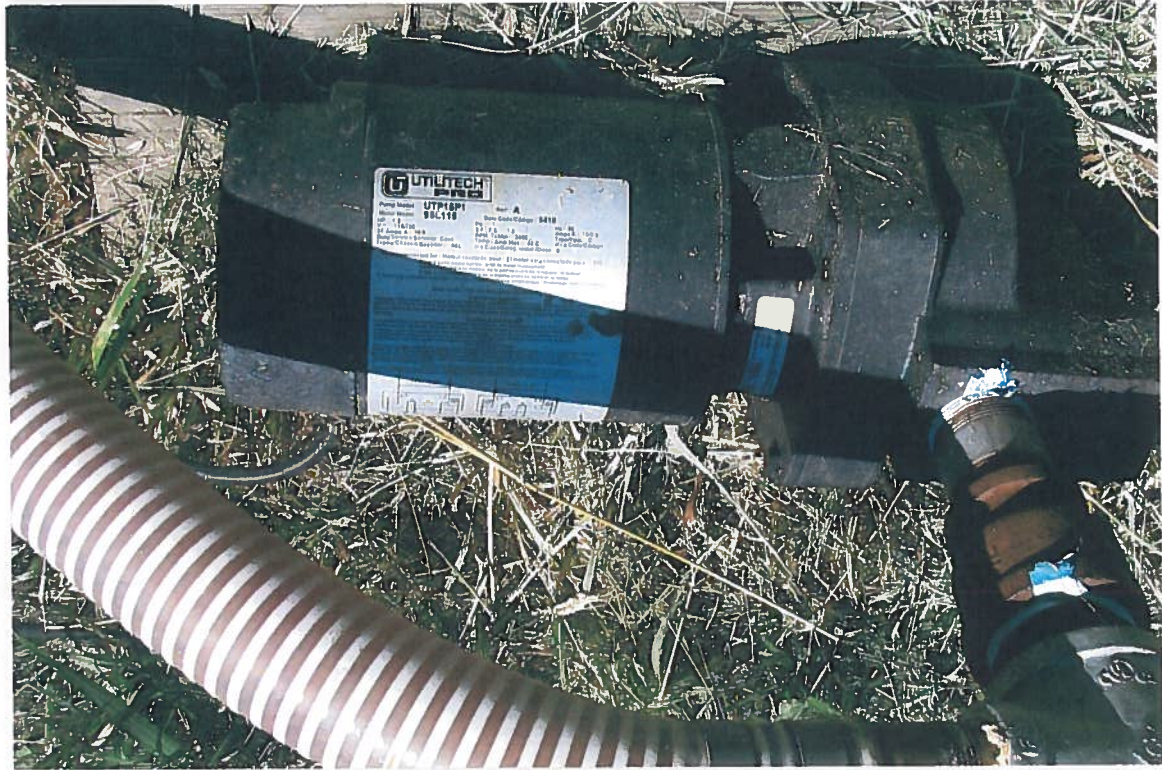
30

52N04W

SENW

SWNE

SENE



95-16498 ,
 Photos provided
 by permit
 holder 07/31/14



95-16498,
Photos provided
by permit holder
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