STATE OF IDAHO DEPARTMENT OF WATER RESOURCES BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 94-9291 Exam Date: 06/17/2020

Current Owner:

DAVID ROHWER 1077 UPPER PAGE ROAD SMELTERVILLE ID 83868

2. Accompanied by: Davod Rohwer Phone No: 208-512-3552 Address: Same as above

Relationship to permit Holder: Permit Holder

3. SOURCE:

HUMBOLDT CREEK

Tributary

SILVER CREEK

Method of Determination: DRG and Arcmap

B. OVERLAP REVIEW

1. Other water rights with the same place of use:

YES Overlap

Water Right No.	Source	Purpose of Use	Basis
94-9644	HUMBOLT CREEK	INSTREAM	PERMIT IN PROCESS
		STOCKWATER	FOR LICENSE
94-9289	UNNAMED STREAM	INSTREAM	PERMIT IN PROCESS
		STOCKWATER	FOR LICENSE
94-9290	SILVER CREEK	INSTREAM	PERMIT IN PROCESS
		STOCKWATER	FOR LICENSE

Comments: WR 94-9644 is a license SPLIT from this WR due to instream stockwater use, causing an inability to create overlapped shape files for licensing purposes. There is no concern for overlap. WRs 94-9289 and 94-9290 are for instream stockwater use for same applicant, but are not a concern for overlap of stockwater POU identified in this WR.

2. Other water rights with the same point-of-diversion:

NO Overlap

Water Right No.	Source	Purpose of Use	Basis	

C. DIVERSION AND DELIVERY SYSTEM

1. LOCATION OF POINT(S) OF DIVERSION:

HUMBOLDT CREEK SE1/4 NE1/4, Sec. 4, Twp 48N, Rge 02E, B.M. SHOSHONE County

Method of Determination: Arcmap and GPS. POD located at -116°12.357, 47°32.266.

PLACE OF USE: IRRIGATION

Turn	Dna	800		N	ΙE			N۱	Ν			SV	Ν			S	E		Totals
1 wp	Rng	Sec	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
48N	02E	4			0.6	1,3													1.9

Total Acres: 1.9

Comments:

PLACE OF USE: STOCKWATER

Turn	Rna	Sec		N	IE			N۱	Ν	,		SV	Ν			S	E		Totals
Twp	Kilg	360	NE	NW	SW	SE													
48N	02E	4			X	Х										Х			

Method of Determination: Field exam and Arcmap.

Delivery System Diagram Attached (required). Indicate all major components and distances between components.
 Indicate weir size/pipe as applicable.

Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be X 1:24,000 or greater.

X Aerial Photo Attached (required for irrigation of 10+ acres).

X Photo of Diversion and System Attached

4.

Well or Diversion ID No.*	Motor Make	Нр	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
WATER PUMP	UNKOWN	1.5			

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Туре	Make	Model No.	Serial No.	Size	Calib. Date
5-GAL BUCKET TEST						

2. Measurements: A 5 gallon bucket test was completed from frost free hydrant off water transfer pump, resulting in diversion flow rate of 5 gal / 13.00 sec x 60 sec/min = 23 gpm = **0.05 cfs**.

E. FLOW CALCULATIONS

Measured Method: 5-gal bucket test = 5 gal / 13,00 sec x 60 sec/min = 23 gpm = 0.05 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation: surface water source, no volume required for licensing purposes

V_{I.R} = (Acres Irrigated) x (Irrigation Requirement) = 1.9 acres x 3.0 afa = 5.7 af

V_{D.R} = [Diversion Rate (cfs)] x (Days in Irrigation season) x 1.9835 = 0.05 cfs x 231 days x1.9835 = 22.9

 $V = Smaller of V_{LR}$ and $V_{D.R} = 5.7$ af

2. Volume Calculations for Other Uses:

STOCKWATER = 20 head mixed stock x 12 gpd x 365 days = 87,600 gal / 325,850 gal/af = 0.27 af = **0.3** af annual volume when rounding applied for department standard for significant figures, admin memo, application processing No. 6.

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G NARRATIVE/REMARKS/COMMENTS

Admin note: WR 94-9291 was split adding WR 94-9644 for instream stockwater use.

Field exam conducted on 6/17/2020 with applicant, David Rohwer, showed water being diverted from a creek by water transfer pump for irrigation and stockwater use. A 5-gallon bucket test was completed, with diversion rate equaling 5 gal / 13.00 sec x 60 sec/min = 23 gpm = 0.05 cfs. Applicant was permitted for a larger diversion rate, but applicant is limited by pump performance identified at time of field exam, resulting in **0.05 cfs** being applied as the maximum diversion rate for license.

During the field exam, the irrigated area related to this POD was sketched out. During licensing review, irrigated acreage was traced out using arcmap aerial imagery equaling 1.9 acres. The annual volume for the irrigation component equals 1.9 ac x 3.0 afa = 5.7 af, but as this is a surface water source, no volume is applied to the license. Applicant used frost free hydrants to water by hose and sprinkler throughout his designated POU.

Applicant was permitted for stockwater use for 20 head of mixed stock. The annual volume for these stock animals equals 12 head mixed stock x 12 gpd x 365 days = 87,600 gal / 325,850 gal/af = 0.3 af. Applicant filled stockwater tanks from frost free hydrants. The stockwater annual volume is diverted from same POD and water system as the irrigation component, which does not have an annual volume applied to license, and as such there will not be a Maximum Diversion Volume applied to license.

Condition 26A and 111 were removed from license. Condition R62 was replaced with R66 to describe irrigation of small acreage and limiting irrigation to 0.03 cfs per acre and/or 3.0 afa per acre. Condition X35 was added describing overlap of stockwater use between WRs 94-9291 and 94-9644, and stating that when combined shall not exceed a total diversion rate of 0.02 cfs for stockwater use.

WR 94-9644 is a license SPLIT from this WR due to instream stockwater use, causing an inability to create overlapped shape files for licensing purposes. There is no concern for overlap. WRs 94-9289 and 94-9290 are for instream stockwater use for same applicant, but are not a concern for overlap of stockwater POU identified in this WR

Have conditions of permit approval been met? X	Yes	No
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H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use	Rate of Diversion	Annual Volume
IRRIGATION	03/15 to 10/31	0.05 CFS	
STOCKWATER	01/01 to 12/31	0.02 CFS	0.3 AF

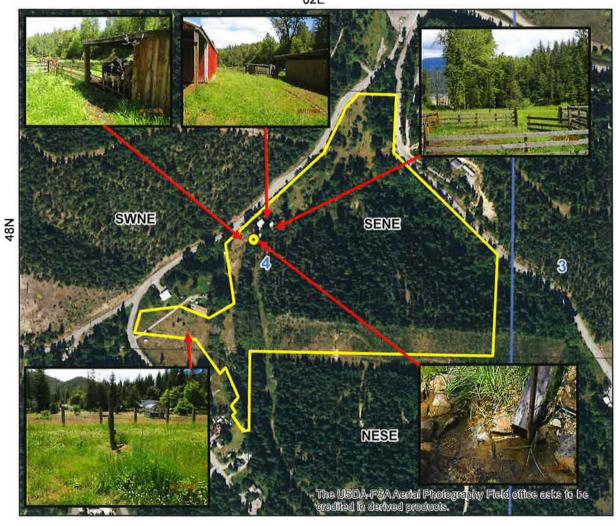
State of Idaho Department of Water Resources

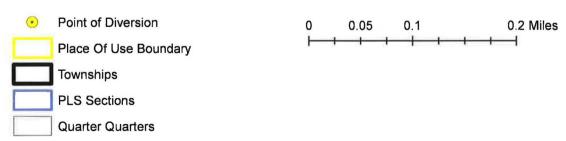
Attachment to Field Exam

94-9291

STOCKWATER system diagram.

02E







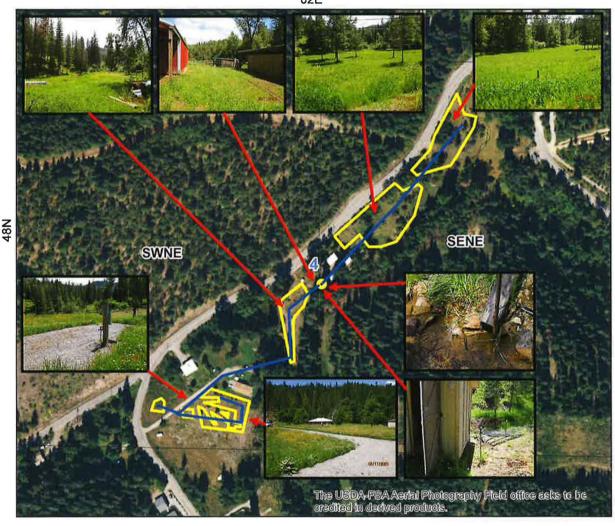
State of Idaho Department of Water Resources

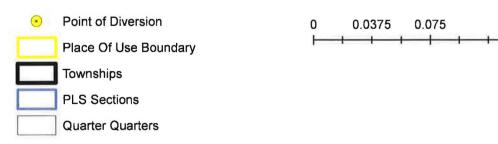
Attachment to Field Exam

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IRRIGATION system diagram.

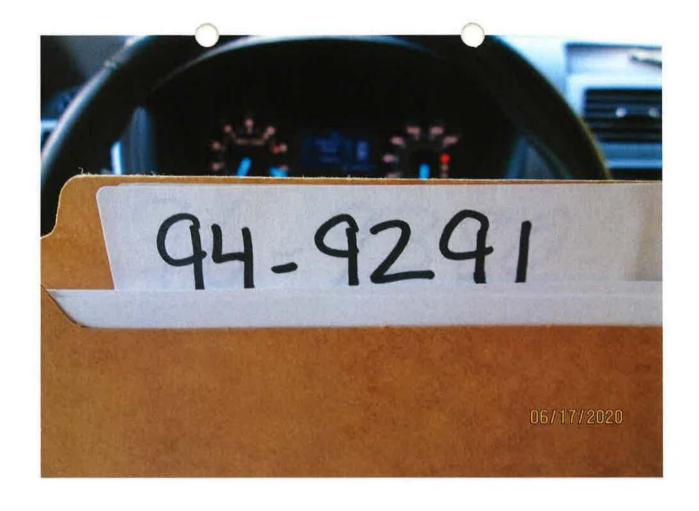
02E







0.15 Miles





POD - SCREENED PIPE IN CREEK



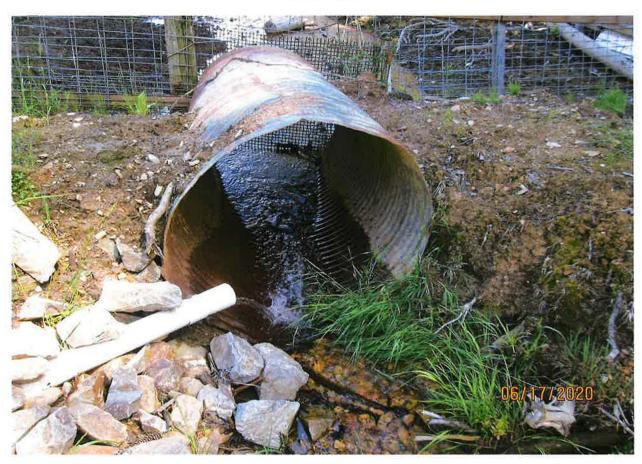
PUMP HOUSE



WATER CONVEYANCE SYSTEM



1.5 HP PUMP



OVERFLOW FROM 1,000 GAL STORAGE TANK BACK TO CREEK



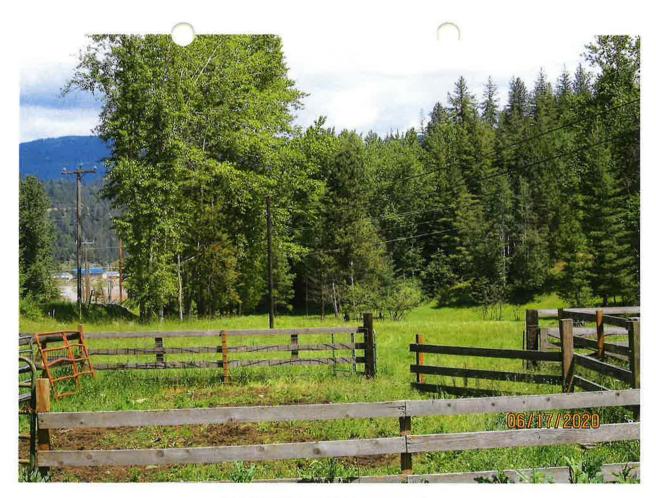
IRRIGATION AND STOCKWATER POU





STOCKWATER POU





IRRIGATION AND STOCKWATER POU



IRRIGATION POU – FROST FREE HYDRANT



IRRIGATION POU





IRRIGATION AND STOCKWATER POU

