

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 74-16008

Exam Date: 6/11/2019

1. Current Owner:

ROBIN R HERBST 26 PINE CREEK RANCH RD SALMON ID 83467
LYNN A HERBST 26 PINE CREEK RANCH RD SALMON ID 83467

2. Accompanied by: Lynn Herbst

3. **SOURCE:**
SPRINGS

Tributary
AGENCY CREEK

Method of Determination: Site visit and meeting with appropriator.

B. OVERLAP REVIEW1. Other water rights with the same place of use: YES Overlap

Overlaps entirely with rights 74-740, 74-741, 74-742, and 74-7147.

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

No other water rights from the spring complex.

Rights 74-740, 74-741, 74-742, and ~~74-7147~~ share the points of rediversion.**C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:

SPRINGS SW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, Sec. 29, Twp 19N, Rge 24E, B.M. LEMHI County
SPRINGS NW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$, Sec. 20, Twp 19N, Rge 24E, B.M. LEMHI County
SPRINGS SW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$, Sec. 20, Twp 19N, Rge 24E, B.M. LEMHI County (Injection)
SPRINGS SW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$, Sec. 20, Twp 19N, Rge 24E, B.M. LEMHI County (Rediversion)
SPRINGS NE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$, Sec. 20, Twp 19N, Rge 24E, B.M. LEMHI County (Rediversion)

Method of Determination: Site visit and aerial photography.

PLACE OF USE: IRRIGATION

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
19N	24E	17			0.2					17.4	31.4			36.1		3.2	1.6		89.9
19N	24E	20					33.9	15.0	12.1	27.9	6.2	1.2							96.3

Total Acres: 186.2

Method of Determination: Aerial photography and permit place of use.

3.

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

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

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

X Photo of Diversion and System Attached

4. The source is a spring complex. The point of injection is from the spring complex into Agency Creek. The point of rediversion is from Agency Creek into L31 or a private ditch owned by the applicant.

D. FLOW MEASUREMENTS

Attached "Discharge Measurement Summary" details the measurement information. The spring complex carried 14.43 cfs at the measurement point.

E. FLOW CALCULATIONS

X Additional Computation Sheets Attached

Measured Method: Flowtracker

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 186.2 \text{ acres} \times 3.5 \text{ afa} = 651.7 \text{ AF}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 3.72 \times 231 \times 1.9835 = 1704.5 \text{ AF}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 651.7 \text{ AF}$$

2. Volume Calculations for Other Uses: N/A

G. NARRATIVE/REMARKS/COMMENTS

This water right is for water from a spring complex. It is supplemental to a group of existing rights.

The spring complex begins at the point of diversion in the NENW of Section 29. It continues north, through the point of diversion in the SESW of Section 20, to the point of injection into Agency Creek. This second point of diversion (~44.957, -113.643) was the point of measurement during the examination.

The point of injection is located ~44.9588, -113.64295.

The point of rediversion is L31 and a ditch owned by the applicant.

Have conditions of permit approval been met? ☒ Yes ☐ No

H. RECOMMENDATIONS

1. Recommended Amounts

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>	<u>Volume</u>
IRRIGATION	03/15 to 11/15	3.72 CFS	651.7 AF
<u>Totals:</u>		3.72 CFS	651.7 AF

2. Recommended Amendments

☐ Change P.D. as reflected above ☒ Add P.(r)D. as reflected above ☐ None

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

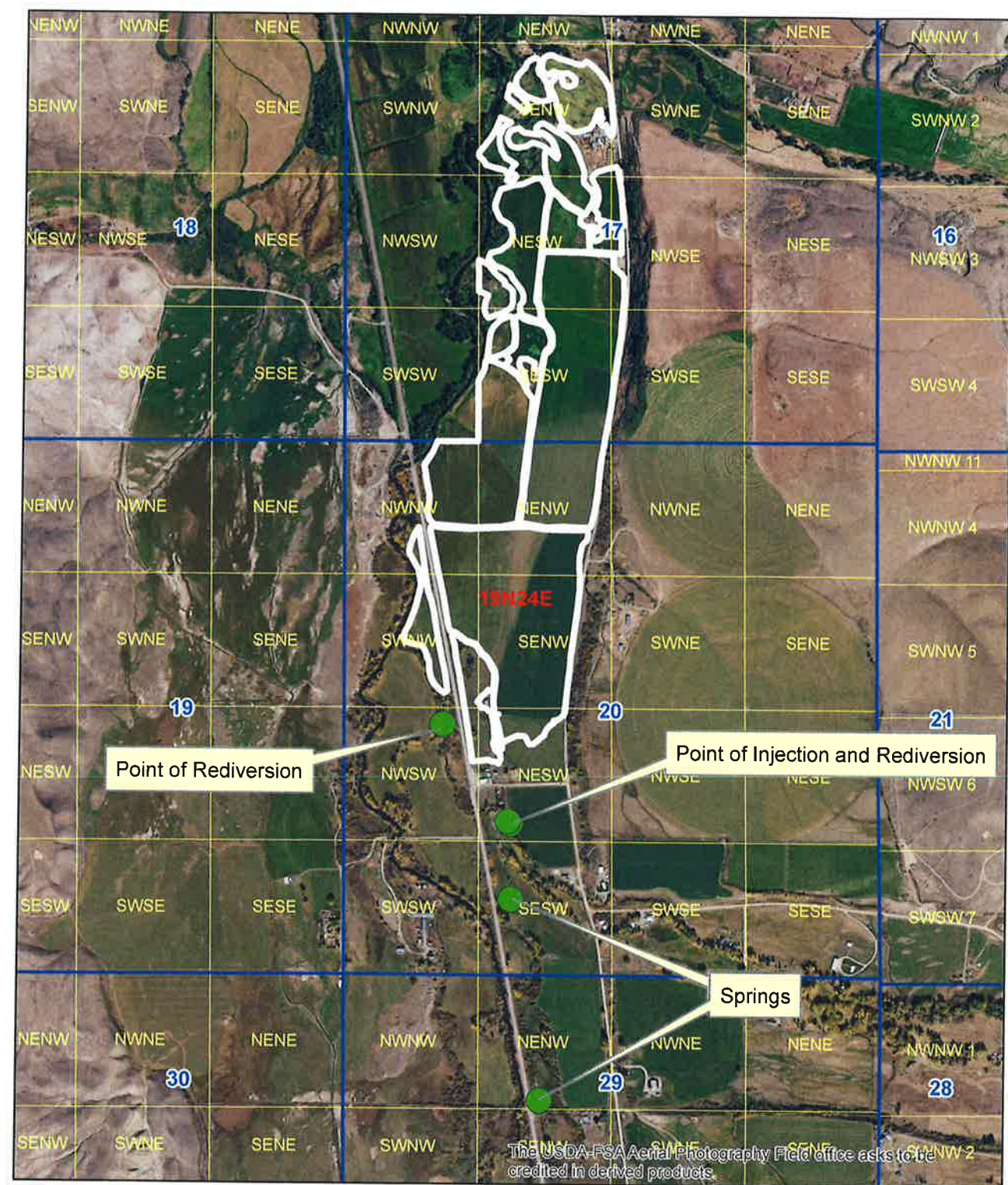
I. AUTHENTICATION

Cooper Fritz - Eastern Region: Water Resource Agent, Senior

Field Examiner's Name _____ Date _____

Reviewer James Cefalo Date 1/28/2020

74-16008 Place of Use and Points of Diversion at Licensing

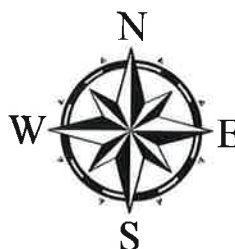


The USDA-FSA Aerial Photography Field office asks to be credited in derived products.

2015 Imagery

Legend

- Water Right POD
- Water Right POU
- Township/Range
- Sections
- QQ



0 0.225 0.45 0.9 Miles



Measuring point- POD in the SE SW of Section 20



Agency.
Crk

Injection
Point (L31)

Rediversion
Point (L31)



L31

Discharge Measurement Summary

Date Generated: Thu Jan 2 2020

File Information

File Name 74TIMES2.WAD
Start Date and Time 2019/06/11 11:15:33

Site Details

Site Name
Operator(s) CC

System Information

Sensor Type FlowTracker
Serial # P4819
CPU Firmware Version 3.9
Software Ver 2.30
Mounting Correction 0.0%

Units (Metric Units)

Distance m
Velocity m/s
Area m²
Discharge m³/s

Discharge Uncertainty

Category	ISO	Stats
Accuracy	1.0%	1.0%
Depth	0.2%	2.5%
Velocity	0.9%	7.0%
Width	0.2%	0.2%
Method	2.3%	-
# Stations	3.9%	-
Overall	4.7%	7.5%

Summary

Averaging Int. 40 # Stations 13
Start Edge REW Total Width 5.425
Mean SNR 31.7 dB Total Area 1.894
Mean Temp 10.66 °C Mean Depth 0.349
Disch. Equation Mid-Section Mean Velocity 0.2158
Total Discharge 0.4087

14.43

Measurement Results

St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	11:15	1.07	None	0.396	0.0	0.0	0.0000	1.00	0.3441	0.091	0.0312	7.6
1	11:15	1.52	0.6	0.366	0.6	0.146	0.3441	1.00	0.3441	0.167	0.0575	14.1
2	11:17	1.98	0.6	0.421	0.6	0.168	0.2703	1.00	0.2703	0.192	0.0520	12.7
3	11:18	2.44	0.6	0.366	0.6	0.146	0.3722	1.00	0.3722	0.167	0.0622	15.2
4	11:20	2.90	0.6	0.296	0.6	0.118	0.2068	1.00	0.2068	0.135	0.0280	6.8
5	11:21	3.35	0.6	0.341	0.6	0.137	0.2097	1.00	0.2097	0.156	0.0327	8.0
6	11:22	3.81	0.6	0.326	0.6	0.130	0.1961	1.00	0.1961	0.149	0.0292	7.2
7	11:24	4.27	0.6	0.381	0.6	0.152	0.1927	1.00	0.1927	0.174	0.0336	8.2
8	11:25	4.72	0.6	0.442	0.6	0.177	0.1557	1.00	0.1557	0.202	0.0315	7.7
9	11:26	5.18	0.6	0.442	0.6	0.177	0.0983	1.00	0.0983	0.202	0.0199	4.9
10	11:28	5.64	0.6	0.351	0.6	0.140	0.1313	1.00	0.1313	0.160	0.0210	5.1
11	11:29	6.10	0.6	0.229	0.6	0.091	0.1011	1.00	0.1011	0.098	0.0099	2.4
12	11:29	6.49	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

Discharge Measurement Summary

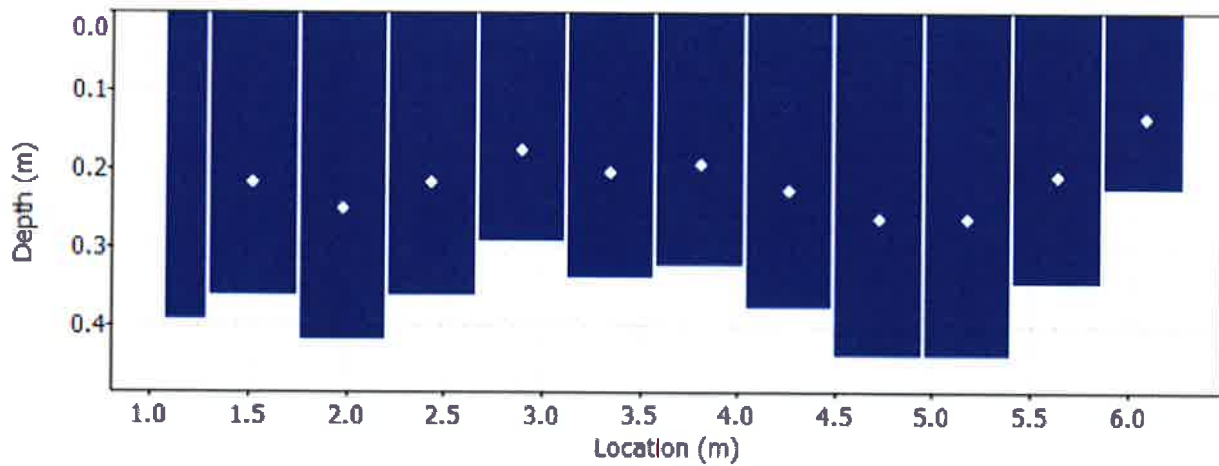
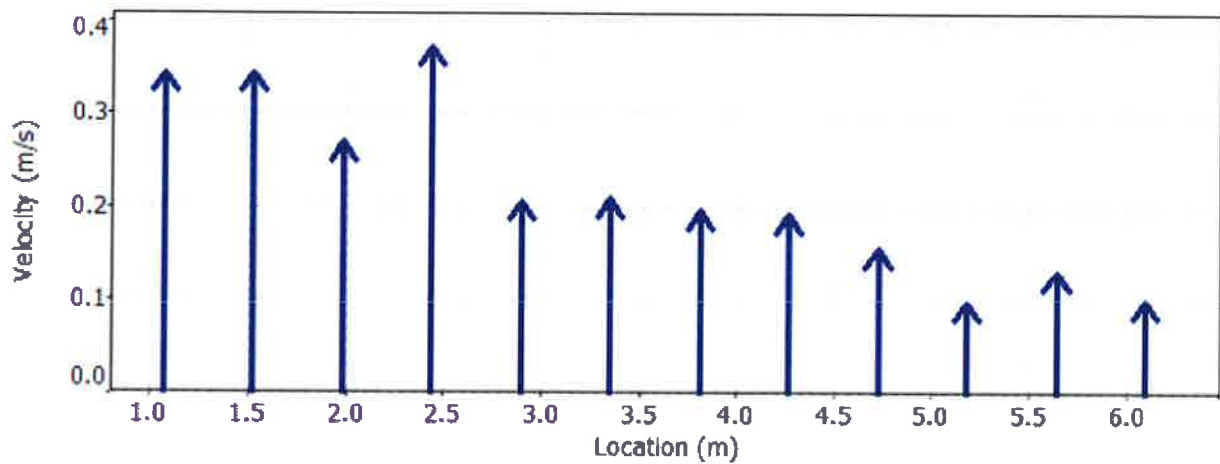
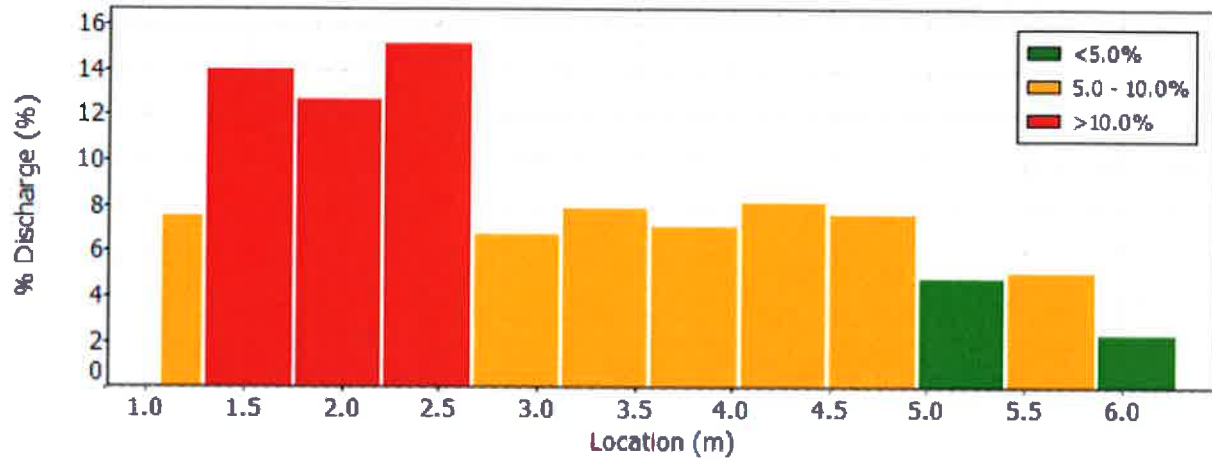
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Start Date and Time 2019/06/11 11:15:33

Site Details

Site Name
Operator(s) CC



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Quality Control

St	Loc	%Dep	Message
11	6.10	0.6	High SNR variation during measurement: 5.2,3.0

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Automatic Quality Control Test (BeamCheck)