

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 96-9760
Exam Date: 09/24/2020

1. Current Owner:
LORI GETTS PO BOX M SANDPOINT ID 83864-0238 AND/OR
CLEMENT YONKER PO BOX M SANDPOINT ID 83864-0238
2. Accompanied by: Clement Yonker and Lori Getts
Phone No: 208-265-0634
Address: Same as above
Relationship to permit Holder: Permit holders

3. SOURCE:

RAPID LIGHTNING CREEK

Tributary

PACK RIVER

Method of Determination: Arcmap and DRG.**B. OVERLAP REVIEW**

1. Other water rights with the same place of use: NO Overlap

Water Right No.	Source	Purpose of Use	Basis

Comments: _____

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

Water Right No.	Source	Purpose of Use	Basis

Comments: _____

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

RAPID LIGHTNING CREEK SW¼ SE¼, Sec. 2, Twp 58N, Rge 01E, B.M. BONNER County

Method of Determination: GPS; POD is a screening intake pipe in creek located at -117°17.845, 48°24.110.

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	
58N	01E	2															1.2		1.2

Total Acres: 1.2

Method of Determination: Field exam and Arcmap aerial imagery.

3.

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 1:24,000 or greater.

☒☒ Aerial Photo Attached (required for irrigation of 10+ acres).☒ Photo of Diversion and System Attached

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
NONE					

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
5 GAL BUCKET MEASUREMENTS						

2. Measurements: Three 5 gallon bucket tests were completed from a hose bib off main irrigation fire hose, with average of three resulting in diversion flow rate of 5 gal / 15.08 sec x 60 sec/min = 19.9 gpm = **0.04 cfs**, considering Department rounding standards.

E. FLOW CALCULATIONS

Measured Method: 5 GAL Bucket Test = (5 gal / 14.94 sec) x 60 sec/min = 20.08 gpm
 = (5 gal / 15.07 sec) x 60 sec/min = 19.90 gpm
 = (5 gal / 15.23 sec) x 60 sec/min = 19.69 gpm

Average of 3ea 5 GAL Bucket Tests = (20.08 gpm + 19.90 gpm + 19.69 gpm) / 3 = 19.9 gpm = 0.04 cfs

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 1.2 \text{ acres} \times 3.0 \text{ afa} = 3.6 \text{ af}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.04 \text{ cfs} \times 214 \text{ days} \times 1.9835 = 17.0 \text{ af}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 3.6 \text{ af}$$

2. Volume Calculations for Other Uses:

This is a surface source irrigation right, and there are no volume metrics applied to the license.

G. NARRATIVE/REMARKS/COMMENTS

Field exam conducted on 9/24/2020 with applicants, Lori Getts and Clement Yonker, showed water being diverted from Rapid Lightning Creek using a screened intake pipe to honda water transfer pump for irrigation purposes. Three 5 gallon bucket flow measurements were taken to determine the diversion rate, with average of three measurements 5 gal / 15.08 sec x 60 sec/min = 19.9 gpm = **0.04 cfs**, considering Department rounding standards, which will be applied as the maximum diversion rate on license.

Applicant was permit approved for 2.0 acres of irrigation at the POU; at time of field exam, the irrigated acreage was sketched out on field maps. During licensing review, Arcmap aerial imagery was used along with field notes to trace out irrigated acreage equaling 1.2 acres. The annual volume associated with the irrigated acreage equals 1.2 ac x 3.0 afa = 3.6 af, but as this is a surface source irrigation right there are no volume metrics applied to the license. Applicant routed water uphill approximately 30 feet using fire hoses, which reduced down to a garden hose line to tripod sprinklers. The applicants irrigated a meadow and surrounding treed land in order to keep it green and looking nice throughout the summer. The POU includes a grown over circular drive that the applicants run the sprinkler line down, irrigating at intervals. Overspray irrigates the forested areas surrounding the circular drive. Mr. Yonker stated the honda water transfer pump is capable of higher discharge rates, but that he had purchased it oversized to overcome routing water uphill and to the farthest reach of his irrigation area. Mr. Yonker stated he has limited the pump performance, so as not to over divert water from the creek.

All conditions on permit will remain on license. There are no overlap concerns for this water right.

Have conditions of permit approval been met? X Yes No

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Rate of Diversion</u>
IRRIGATION	04/01 to 10/31	0.04 CFS

Totals: 0.04 CFS

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

I. AUTHENTICATION

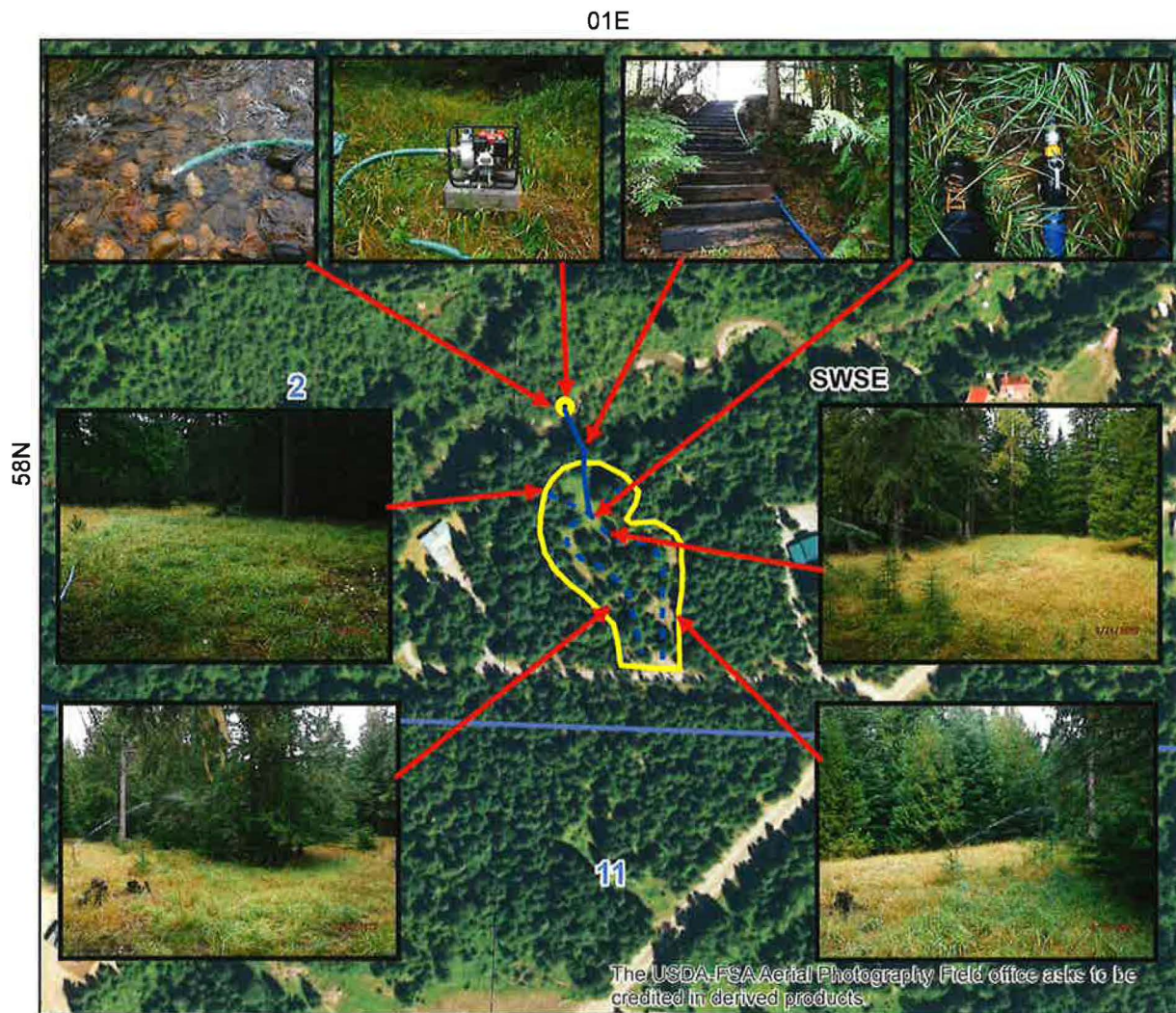
Luke Bates - Water Resource Agent






Field Examiner's Name Date 10/22/2020

Reviewer Date 10/30/2020

State of Idaho
Department of Water Resources
Attachment to Field Exam
96-9760

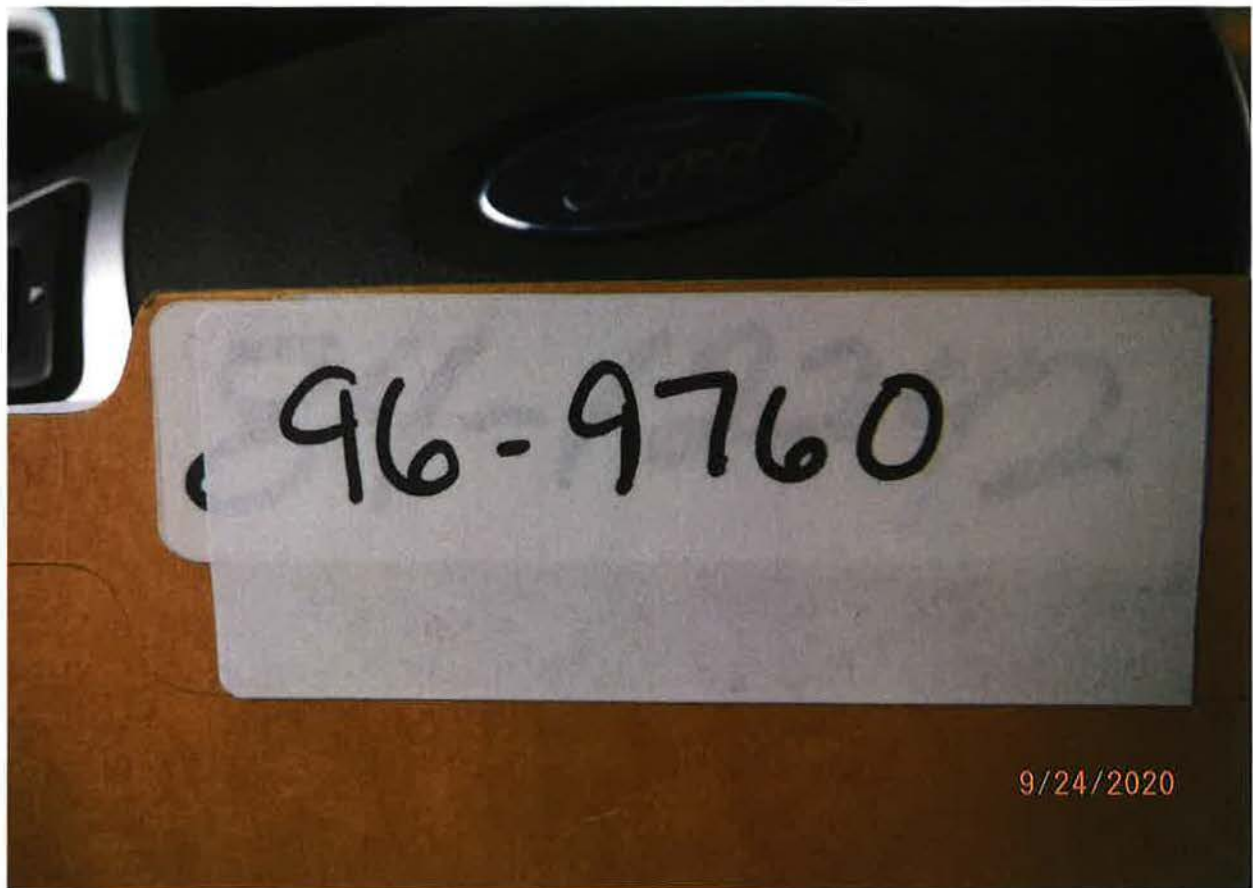
IRRIGATION system diagram.



-  Point of Diversion
-  Place Of Use Boundary
-  Townships
-  PLS Sections
-  Quarter Quarters

0 0.035 0.07 0.14 Miles

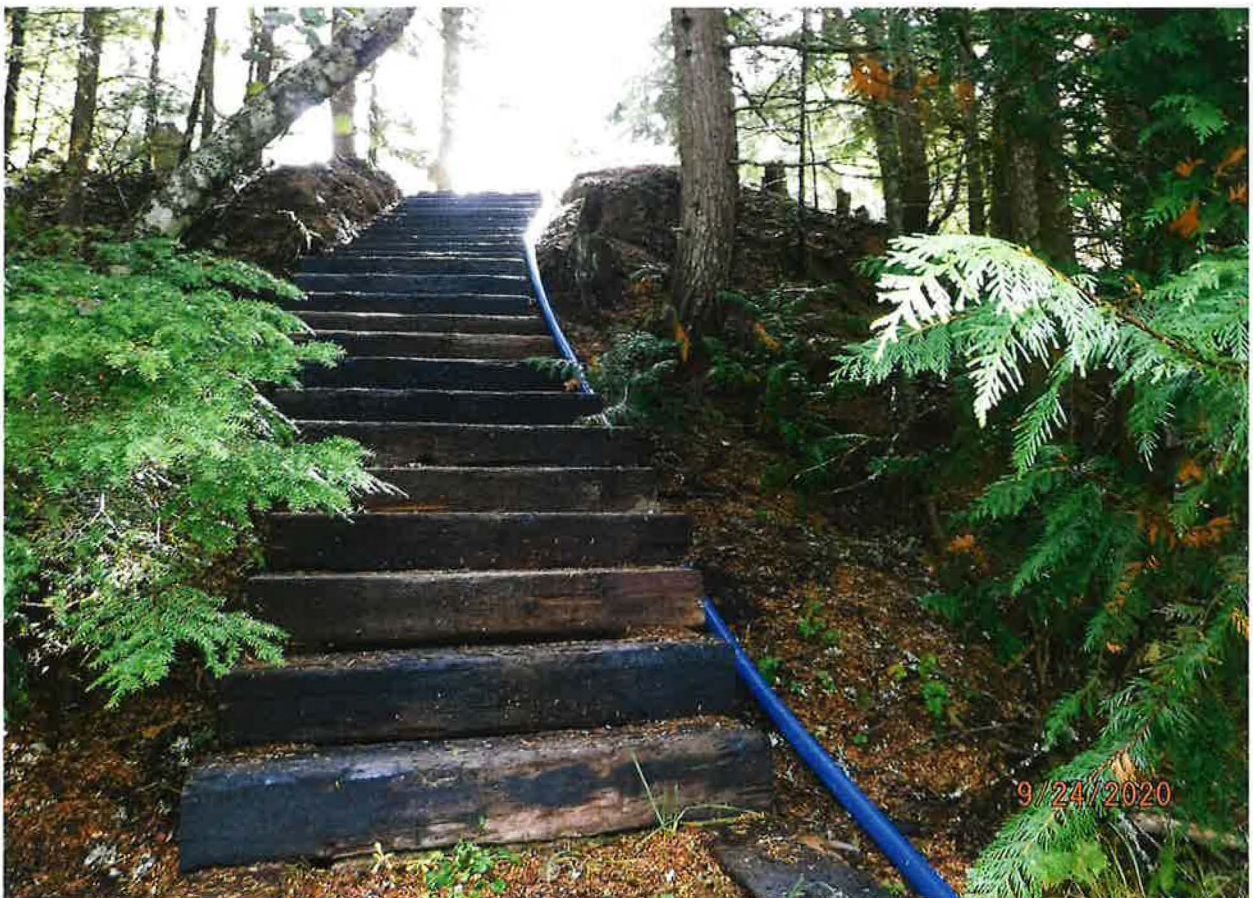




POD – SCREENED INTAKE PIPE IN CREEK



DIVERTING WORKS AT POD – HONDA GX120 WATER TRANSFER PUMP



WATER ROUTED UP HILL FROM POD TO POU VIA FIRE HOSE



WATER CONVEYANCY SYSTEM – FIRE HOSE REDUCED DOWN TO GARDEN HOSE ATTACHMENT



5 GAL BUCKET TESTS 3EA COMPLETED FOR FLOW MEASUREMENT



IRRIGATION POU





IRRIGATION POU





IRRIGATION POU

