

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-17482
Exam Date: 07/23/2020

1. Current Owner:
ROBERT R HOLLINGSWORTH 3956 TREVINO DR COEUR D ALENE ID 83815
2. Accompanied by: Robert R Hollingsworth
Phone No: 208-661-7021
Address: Same as above
Relationship to permit Holder: Permit Holder

3. **SOURCE:**
CEDAR CREEK

Tributary
WOLF LODGE CREEK

Method of Determination: Arcmap and DRG.

B. OVERLAP REVIEW

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

| Water Right No. | Source | Purpose of Use | Basis |
|-----------------|-------------|----------------|---------|
| 95-14411 | GROUNDWATER | DOMESTIC | DECREED |
| | | | |

Comments: Right 95-14411 is decreed for same applicant, and uses ground water for domestic use.

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:**

CEDAR CREEK SE¼ SE¼, Sec. 32, Twp 50N, Rge 02W, B.M. KOOTENAI County

Method of Determination: GPS; POD is a submersible pump in creek located at -116°36.661, 47°37.900.

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 | |
| 50N | 02W | 32 | | | | | | | | | | | | | | | | | 0.4 0.4 |

Total Acres: 0.4

Method of Determination: Field exam and Arcmap.

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 |
|---------------------------|------------|----|------------------|-----------|-----------------------------------|
| N/A | | | | | |

D. FLOW MEASUREMENTS

1.

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

2. Measurements: Three 5 gallon bucket tests were completed from 1 inch pvc pipe where it entered 24 hr use cistern, with average of three resulting in diversion flow rate of 5 gal / 41.63 sec x 60 sec/min = 7.2 gpm = **0.02 cfs**.

E. FLOW CALCULATIONS

Measured Method: 5 GAL Bucket Test = (5 gal / 41.23 sec) x 60 sec/min = 7.28 gpm
 = (5 gal / 42.51 sec) x 60 sec/min = 7.06 gpm
 = (5 gal / 41.16 sec) x 60 sec/min = 7.29 gpm
 Average of 3ea 5 GAL Bucket Tests = (7.28 gpm + 7.06 gpm + 7.29 gpm) / 3 = 7.2 gpm = 0.02 cfs

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 0.4 \text{ ac} \times 3.0 \text{ afa} = 1.2 \text{ af}$
 $V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.02 \text{ cfs} \times 246 \text{ days} \times 1.9835 = 9.8 \text{ af}$
 $V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 1.2 \text{ af}$

2. Volume Calculations for Other Uses:

Irrigation use is from a surface water source, as such there are no volumes applied to license.

G. NARRATIVE/REMARKS/COMMENTS

Field exam conducted on 7/23/2020 with applicant, Robert Hollingsworth, showed water being diverted from a creek using a ¼ HP submersible pump for irrigation purposes. Applicant routed 1 inch PVC pipe to a concrete cistern, for 24 hour impoundment use, before servicing a pressurized irrigation system. Three 5 gallon bucket flow measurements were taken to determine the diversion rate, with average of three measurements equaling 5 gal / 41.63 sec x 60 sec/min = 7.2 gpm = **0.02 cfs**, which will be applied as the maximum diversion rate on license.

Applicant permitted for 2.0 acres of irrigation; at time of field exam, the irrigated acreage was sketched out. During licensing review, irrigation acreage was traced out using Arcmap aerial imagery and equals 0.4 acres. The annual volume requirement equals 0.4 ac x 3.0 afa = 1.2 af, but as this is a surface water source right, no volumes are applied to license. Applicant used 1 inch PVC pipe to route water from the POD to the POU, which incorporated a small pressure tank to service two runs of pressurized sprinklers and soaker hose lines that border applicant's driveway. Irrigation use is primarily to water trees that line driveway, as well as some ground cover plants and grass.

Condition 26A was removed from permit at time of licensing. All other conditions remain for licensing. Right 95-14411 overlaps this rights POU, and uses well water for domestic purposes, but on a separate system than this Right's irrigation system resulting in no concern for overlap. There are no other overlap concerns for this right.

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> |
|-----------------------|----------------------|--------------------------|
| IRRIGATION | 03/15 to 11/15 | 0.02 CFS |

Totals: 0.02 CFS

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

I. AUTHENTICATION

Luke Bates - Water Resource Agent

Field Examiner's Name

[Signature]

Date

8/20/2020

Reviewer

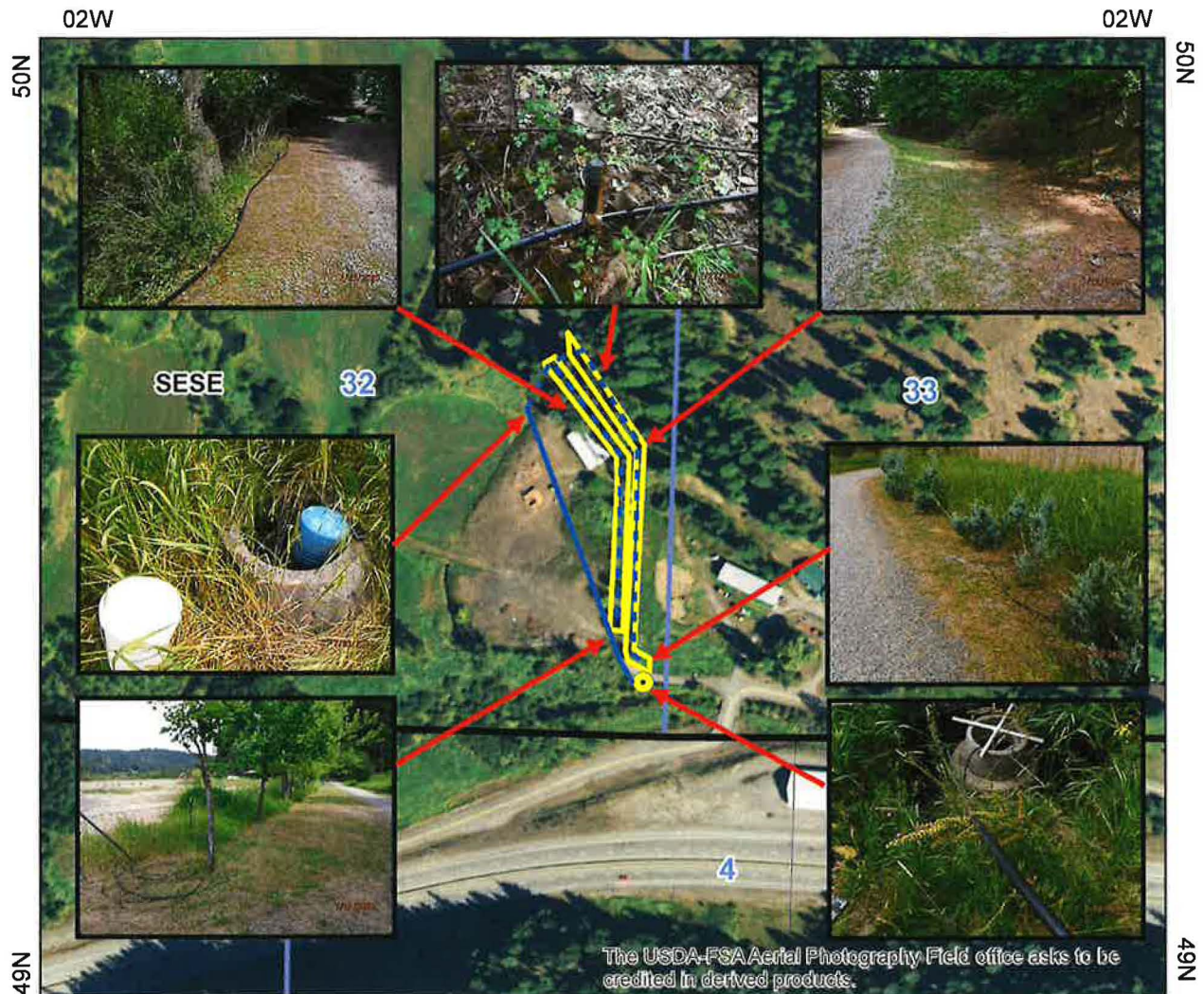
[Signature]

Date

8/21/2020

State of Idaho
Department of Water Resources
Attachment to Field Exam
95-17482

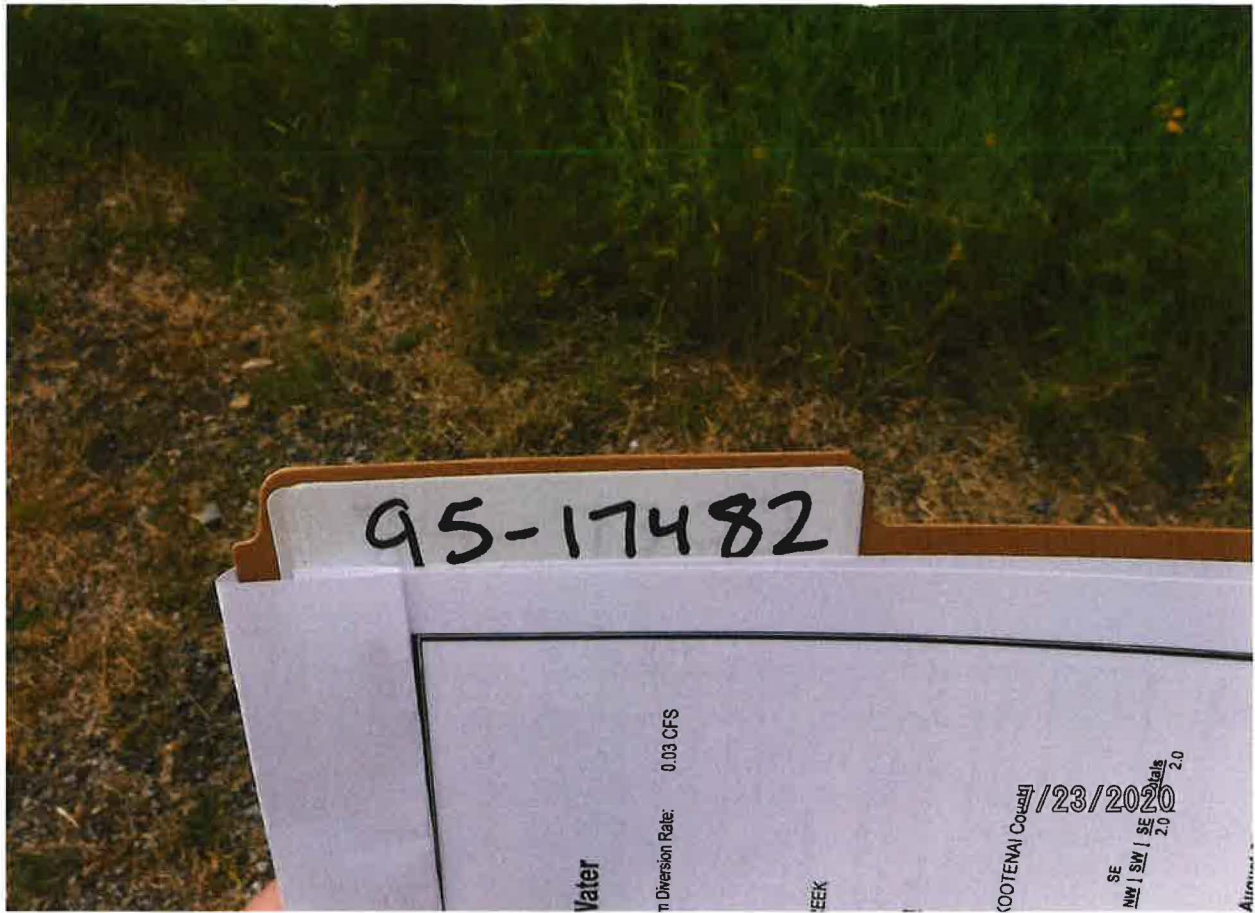
IRRIGATION system diagram.



- 02W
- 50N
- 49N
- 02W
- 02W
- Point of Diversion
- Place Of Use Boundary
- Townships
- PLS Sections
- Quarter Quarters

0 0.035 0.07 0.14 Miles





POD – SUBMERSIBLE PUMP IN CEDAR CREEK



EVERBILT 1/4 HP SUBMERSIBLE SUMP PUMP





STORAGE CISTERN – 24 HOURS USE FOR IRRIGATION





IRRIGATION POU





IRRIGATION SPRINKLER SYSTEM





IRRIGATION POU





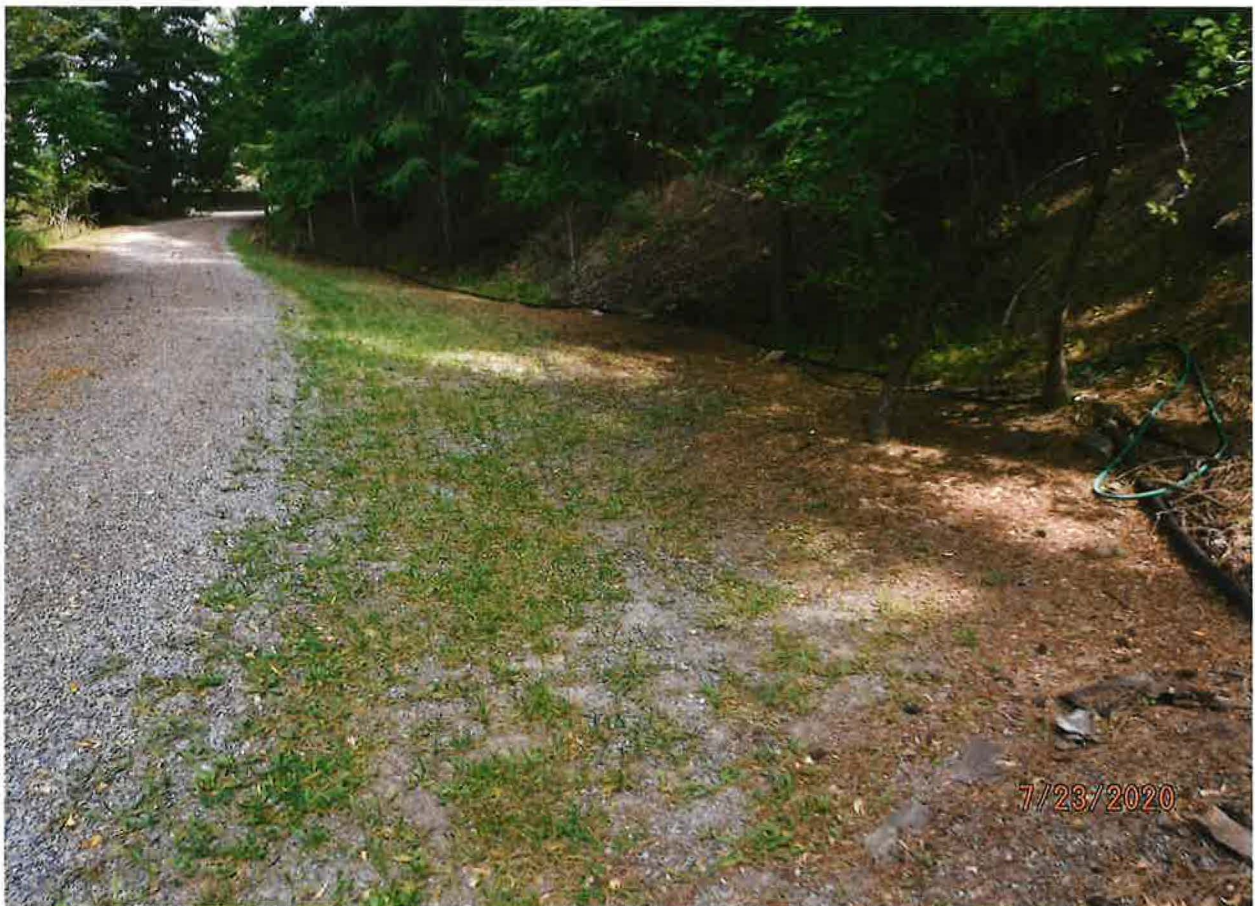
IRRIGATION POU



IRRIGATION SYSTEM AT POU



IRRIGATION SYSTEM PVC PIPE



IRRIGATION POU