

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 37-8905

Exam Date: 1/4/2012

1. Current Owner: US DEPT OF INTERIOR
BUREAU OF LAND MANAGEMENT
400 WEST F ST
SHOSHONE ID 83352
(208)732-7200

2. SOURCE

CALHOUN SPRING

TRIBUTARY

BIG WOOD RIVER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 37-20119 (Stockwater; 0.02 cfs; Bureau of Land Management)
2. Other water rights with the same point of diversion: 37-20119

C. DIVERSION AND DELIVERY SYSTEM1. LOCATION OF POINT(S) OF DIVERSION:

CALHOUN SPRING

SE1/4SE1/4NE1/4

Sec. 6, Twp 02S, Rge 18E, B.M.

BLAINE County

Method of Determination: Waypoints were collected with a Garmin GPS map 76S receiver and downloaded into an ArcMap shapefile that corresponds with 2009 aerial photography and verified the point of diversion to be in Twp 02S Rge 18E S 6 SESENE¼. See attached map.

2.

PLACE OF USE: STOCKWATER

Twp	Rge	Sec	NE				NW				SW				SE				
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	Totals
02S	18E	6				X													

WILDLIFE same as STOCKWATER

Method of Determination: Waypoints were collected with a Garmin GPS map 76S receiver and downloaded into an ArcMap shapefile that corresponds with 2009 aerial photography and verified the place of use to be in Twp 02S Rge 18E S 6 SENE¼. See attached map.

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

D. FLOW MEASUREMENTS: N/A**E. FLOW CALCULATIONS**

_____Additional Computation Sheets Attached

Measured Method: Hazen Williams Full Pipe Flow Calculation:

$$Q=0.432C_1D^{2.63}S^{0.54}$$

Where:

C₁ = roughness coefficient

D = Diameter in feet

S = Slope

S = 25' elevation drop / 150' distance = 0.167

C₁ = 140 (coefficient for polyethylene)

D = 0.104' (1.25" polyethylene pipe)

Q = 0.059 cfs potential delivery from system.

F. VOLUME CALCULATIONS

1. Volume Calculations for Other Uses: Stockwater/Wildlife:

Stockwater:

110 Range Cattle based on a 275 day flexible season of use:

12 gpd/head x 110 head x 275 days / 325850 gallons/AF = 1.1 AFAWildlife:

Approximately 30 deer (wildlife):

12 gpd/head x 30 head x 365 days / 325850 gallons/AF = 0.4 AFATotal: 1.1 AF + 0.4 AF = 1.5 AF**G. NARRATIVE/REMARKS/COMMENTS**

Permit 37-8905 is for 0.02 cfs stockwater and 0.02 cfs wildlife.

Application for permit 37-8905 submitted by US Dept of Interior/ Bureau of Land Management was filed on April 18, 2000, and proof of Beneficial Use was submitted June 23, 2000.

System consists of a spring box that supplies water through a 1.25" polyethylene pipe over a distance of 150' to a trough that measures 14' L x 3.7' W x 1.3' D. The water level in the trough is regulated by a float valve. On the day of the exam the trough was filled to capacity with both water and ice, with no measurable flow, therefore the Hazen Williams Full Pipe Flow Calculation was utilized to obtain a potential rate of diversion. Results indicate the system has the potential to deliver 0.059 cfs to the trough.

No cattle were present at the trough on the day of the exam, but cow dung was visible in the area. Wildlife signs were plentiful with fresh sign of deer and Hare at the trough and spring. Volume calculations are based on the number of cattle listed on the application for permit and wildlife numbers are based on an average sized deer herd.

An overlap review indicates that a stockwater right, 37-20119, already exists for this spring. According to a departmental memo in the file, this application is an attempt to document the development of the trough system at the site. As such, the draft license will be conditioned to limit it to 0.02 cfs when combined with right 37-20119.

Recommend permitting a rate of diversion of 0.02 cfs and an annual volume of 1.1afa for stockwater.

Recommend permitting a rate of diversion of 0.02 cfs and an annual volume of 0.4 afa for wildlife.

Have conditions of permit approval been met? ☒ Yes ☐ No**H. RECOMMENDATIONS****1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
STOCKWATER	1/01 to 12/31	0.020 CFS	1.1 AFA
WILDLIFE	1/01 to 12/31	0.020 CFS	0.4 AFA
	<u>Totals:</u>	0.020 CFS	1.5 AFA

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 ☐ Other**I. AUTHENTICATION**

Field Examiner's Name

Date

1-10-2012

Reviewer

Date

1/17/2012

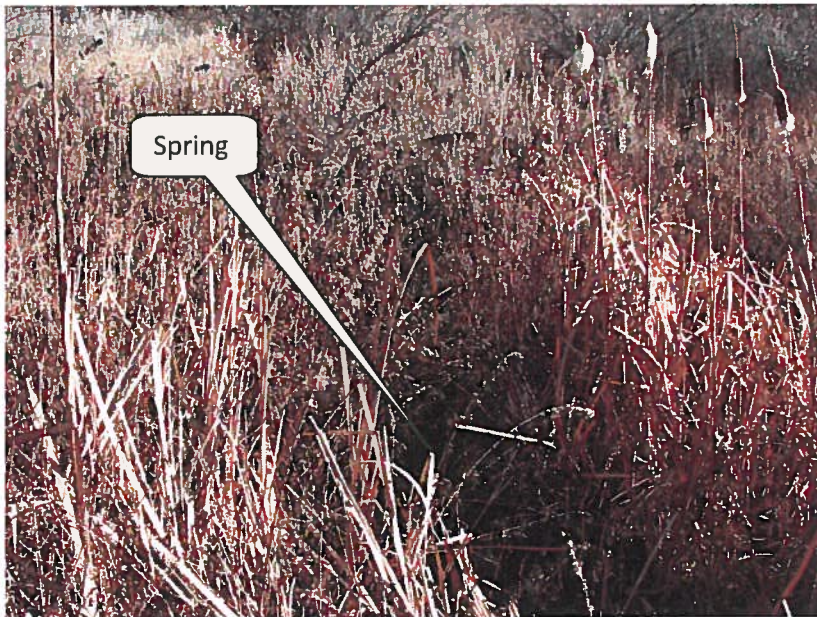


Figure 1: Overgrown Spring and Spring Box Location.

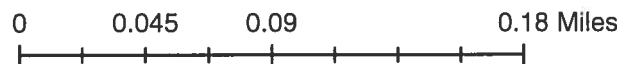
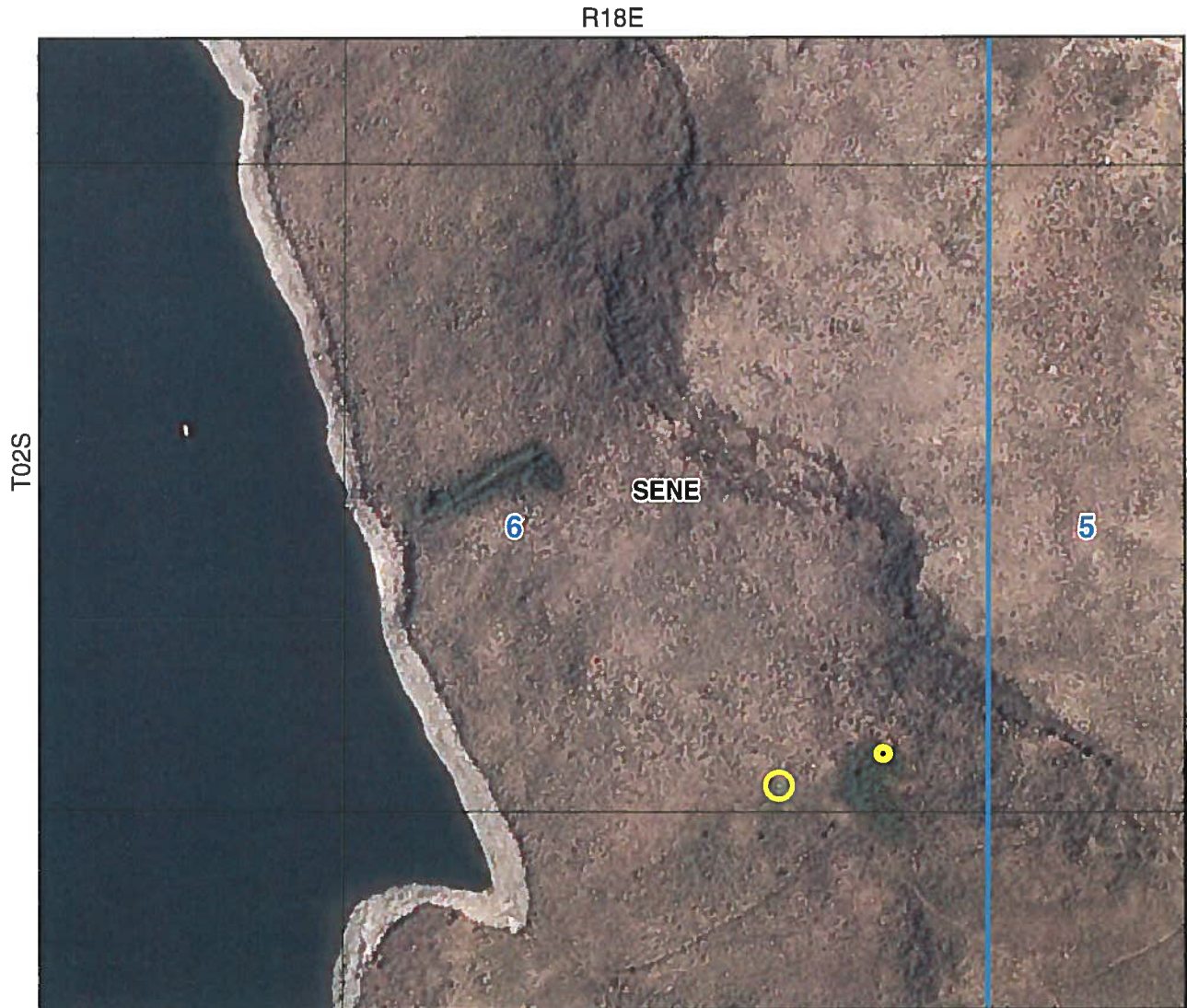


Figure 2: Trough.

State of Idaho
Department of Water Resources
Water Right License

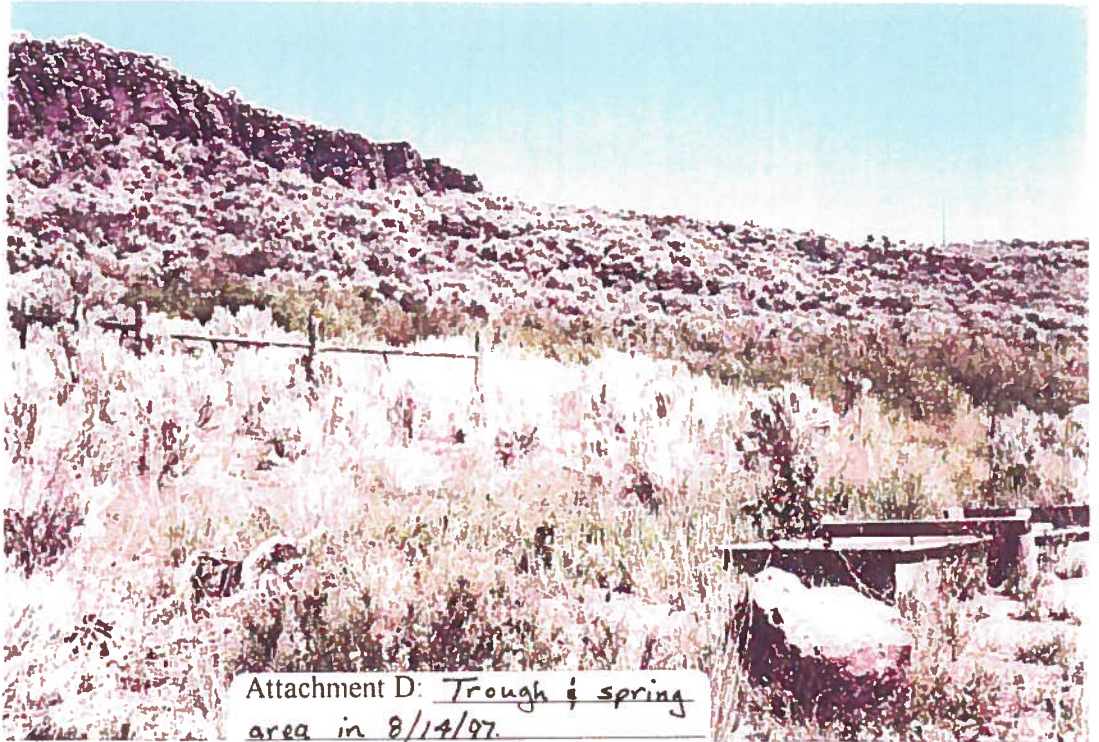
37-8905

Water Service Area Boundary for Us Dept Of Interior



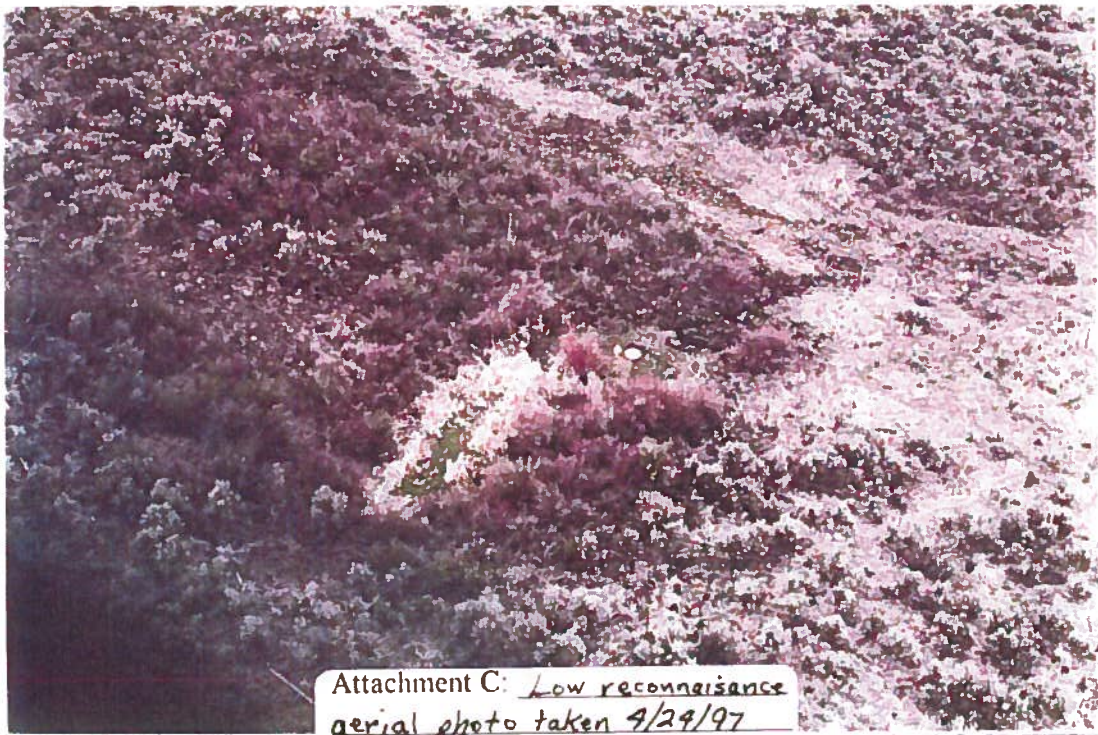
-  Point of Diversion
-  Place Of Use Boundary
-  Townships
-  PLS Sections
-  Quarter Quarters





Attachment D: Trough & spring
area in 8/14/97.

37-08905



Attachment C: Low reconnaissance
aerial photo taken 9/24/97
of spring box.

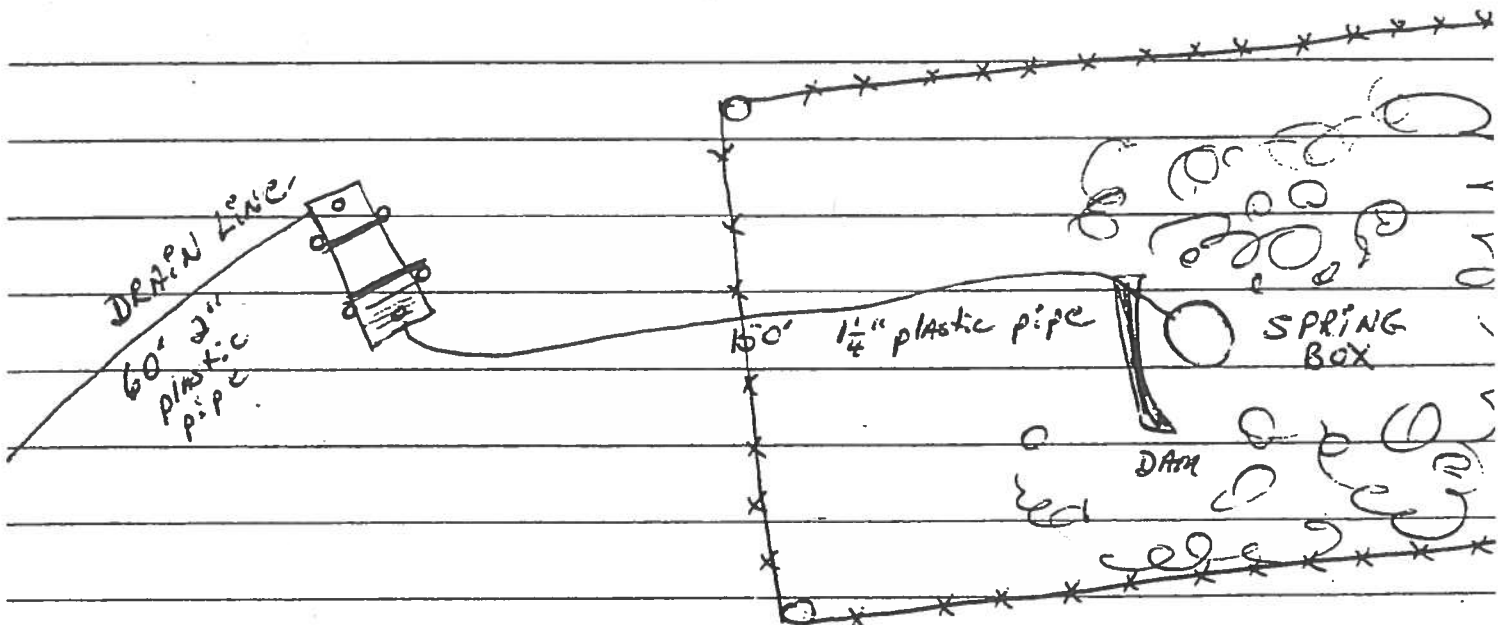
MICROFILMED

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N ↑

Calhoun Springs

7121-16-1503



SPRING BOX filled with approx 1 1/2 yd gravel
telvar and black plastic used on dam face
pipe buried approx 2' deep

USER (Harold Drussell) building enclosure. 5-22-89

RC