

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-12021

Exam Date: 7/26/2012

1. Current Owner: WILLIAM JEFF SMITH
4000 N EAGLE RD
EAGLE ID 83616
(208)891-0946

And/Or

ANTOINETTE SMITH
4000 N EAGLE RD
EAGLE ID 83616
(208)939-6373

2. Accompanied by: Antoinette (Toni) Smith
Phone No: (208) 939-6373
Address: Same
Relationship to Permit Holder:

3. **SOURCE****TRIBUTARY**

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: None
2. Other water rights with the same point of diversion: 63-3586, 63-11397

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

GROUND WATER

NE1/4NE1/4

Sec. 32, Twp 05N, Rge 01E, B.M.

ADA County

Method of Determination: Arc Map (Aerial Photo); GPS – Latitude N.43°44.034', Longitude W.116°21.327'; Datum – NAD83.

2.

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	
05N	01E	32	3.5																3.5

Total Acres: 3.5

Method of Determination: Arc Map (Aerial Photo)

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.

<u>Well or Diversion ID No.*</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Pump Serial No. or Discharge Size</u>
Unknown		7.5			(3")

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1.

<u>Measurement Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
N/A						

2. Measurements: No field measurement. Pitot tube too small to perform pressure measurement on sprinkler head Nozzles.

E. FLOW CALCULATIONS

Additional Computation Sheets Attached

Measured Method: (Theoretical)

$$Q = 8.8 \times 0.7 \times 7.5/155 + (2.31 \times 50) = 46.2/270.50 = 0.17 \text{ cfs}$$

$$Q(\text{theoretical}) = 0.17 \text{ cfs} > 0.10 \text{ cfs } Q(\text{permit})$$

$$HP = 7.5$$

$$Z = 155' \text{ (IDWR Theoretical Dynamic)}$$

Pumping Level Diagram for Wells)

$$P = 50 \text{ psi (Assumed)}$$

Appears existing pumping system is capable of attaining the permit diversion rate of 0.10 cfs.

F. VOLUME CALCULATIONS**1. Volume Calculations for Irrigation:**

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 3.5 \times 4.5 = 15.8 \text{ AFA}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.10 \times 260 \times 1.9835 = 51.6 \text{ AFA}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 15.8 \text{ AFA}$$

2. Volume Calculations for Other Uses: N/A**G. NARRATIVE/REMARKS/COMMENTS****WATER SUPPLY SYSTEM:**

A ground water well, drilled in a 12" casing, provides water for irrigation and stock water. The well contains two submersible pumps. A 1 ½ hp submersible pump diverts water for domestic use for one home (WR 63-3586). A 7.5 hp submersible pump diverts water for irrigation and stock water.

IRRIGATION SYSTEM:

A 7.5 hp submersible pump diverts water for sprinkler irrigation of lawn, landscaping, and pasture land. The irrigation system is comprised of 27 stations. The pressurized irrigation system uses a variety of rotary and pop-up sprinklers and drip-lines.

STOCK WATER:

The beneficial use for stock water as stated on the permit is a duplication of stock water for decreed Water Right 63-3586 (Same POD and same stock). Therefore, stock water beneficial use has been removed from the permit.

OVERLAP (POD):

Ground water appropriated for Decreed Water Right 63-3586, and Licensed Water Right 63-11397, is pumped from the same well as Water Right Permit No. 63-12021. (See Attached POD Overlap Analysis Sheet).

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

CONDITION NO.7 – Water bearing zone to be appropriated is 250 – 300 feet. Based on the well log information, Leroy Sprague, who was the original property owner, had the well drilled in July, 1967. The depth of the well is 235 feet, which is 15 feet shy of the required minimum water bearing zone depth of 250 feet. A water bearing zone requirement was not required for Decreed Water Right 63-3586. Since the well was drilled prior to the water bearing zone requirements in the Boise River drainage, recommend waiving Approval Condition No.7.

RATE &/OR STORAGE RECOMMENDED FOR LICENSING

Description	Rate of Flow (cfs)		Storage (af)
Permit Amount	0.12	&/or	N/A
Beneficial Use Limit	0.12	&/or	N/A
System Measurement	0.17 (theoretical)	&/or	N/A
Proof Fee Amount	0.20	&/or	20.0
Recommended Amount	~~0.12~~ 0.10 RC	&/or	N/A

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	03/01 to 11/15	0.100 CFS	15.8 AFA
<u>Totals:</u>		0.100 CFS	15.8 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 Rick Collingwood Date 11/9/12

Reviewer _____ Date _____

POINT OF DIVERSION OVERLAP ANALYSIS SMITH PROPERTIES

Property Owners: William Jeff & Antoinette (Toni) Smith
Parcel No. S0232110015 – 9.7 acres

International Stone, Inc. (Owners – William Jeff & Toni Smith)
Parcel No. S0232110075 – 5.0 acres

Summary:

Two water rights, 63-3586 (Decreed – 2007), and 63-11397 (Licensed – 1992), and Water Right Permit 63-12021, are associated with the two Smith parcels. All three are licensed or permitted to appropriate water from the same well, located in Parcel No. S0232110015. An exhibit is attached delineating the places of use for the licensed water rights. Below is the breakdown for each decreed and licensed water right and permit:

<u>WATER RIGHT</u>	<u>BU</u>	<u>FLOW RATE</u>	<u>VOLUME</u>	<u>TOTAL/NOTES</u>
63-3586	7.2 ac. Irr.	0.14 cfs	32.4 AFA	0.14 cfs/33.7 AFA
	D-1 Home	0.02 cfs	0.6 AFA	Full rate/volume
	S-20 Head	0.02 cfs	0.7 AFA	
63-11397	2.0 ac. Irr.	0.06 cfs	9.0 AFA	0.06 cfs/9.0 AFA Full rate/volume Capacity Limits – 0.14 cfs combined Rights
63-12021	3.5 ac. Irr S-15 Head	0.10 cfs (All ready licensed)	15.8 AFA	0.10 cfs/15.8 AFA Full rate/volume

V (diversion rate) = 0.14 cfs x 260 days x 1.9835 = 72.2 AFA

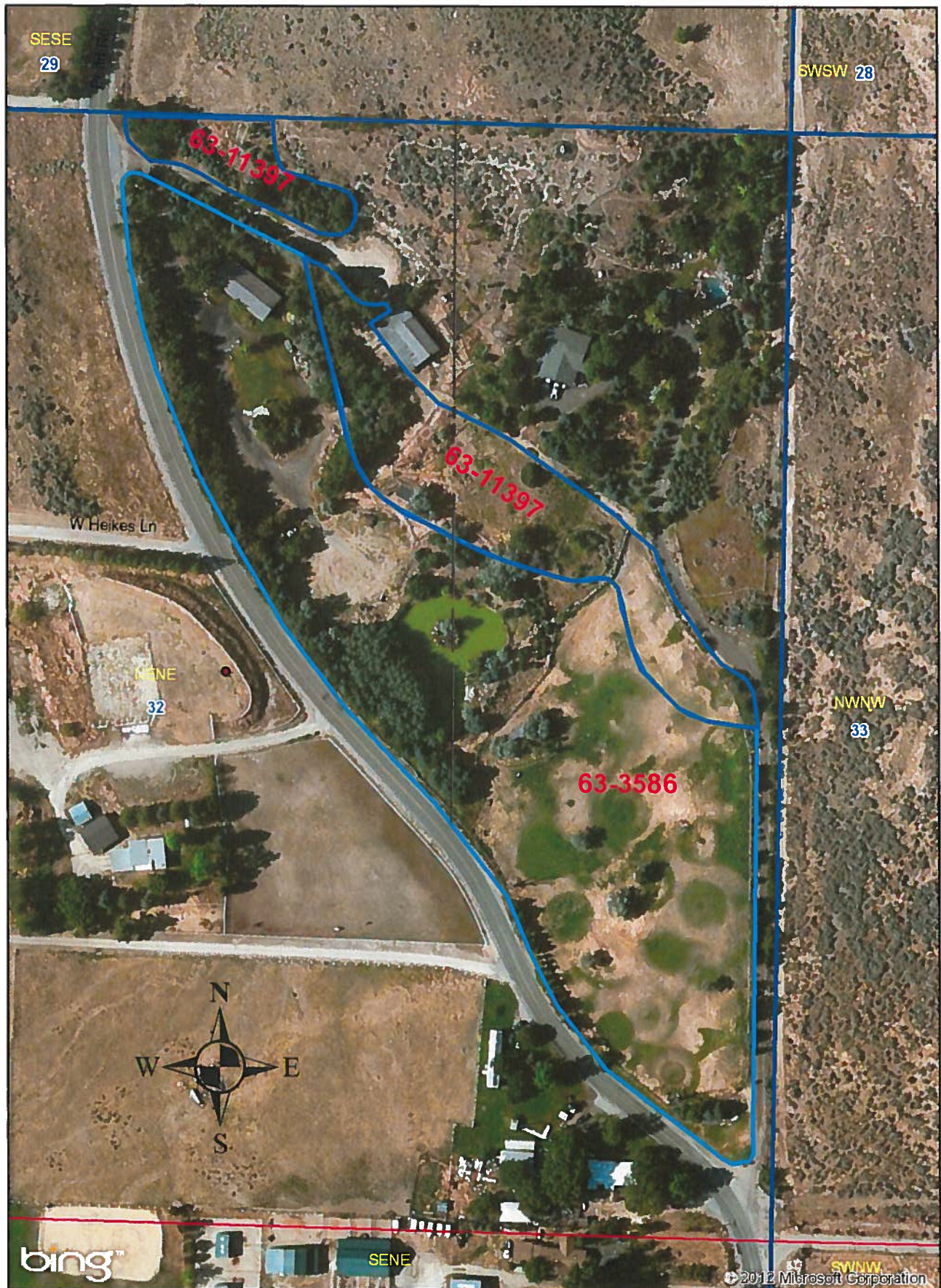
V (total for the 3 rights) = 58.5 AFA

(Pumping system adequate to meet the beneficial use requirements for all 3 rights)

- F06 – Three (3) water rights have the same point of diversion.
- X35 – All three (3) water rights have a combined maximum diversion rate of 0.14 cfs.
- Water Bearing Zone – Well is located in the Basin 63 shallow ground water zone.
Well log – Screens installed from 210' – 230'.
Although water bearing zone for Water Right Permit No. 63-12021 is 250' – 300', allow 210' – 300' water bearing zone since well was drilled in 1967, which was prior to the Departments designation for the Basin 63 shallow ground water zone.

SMITH WATER RIGHTS

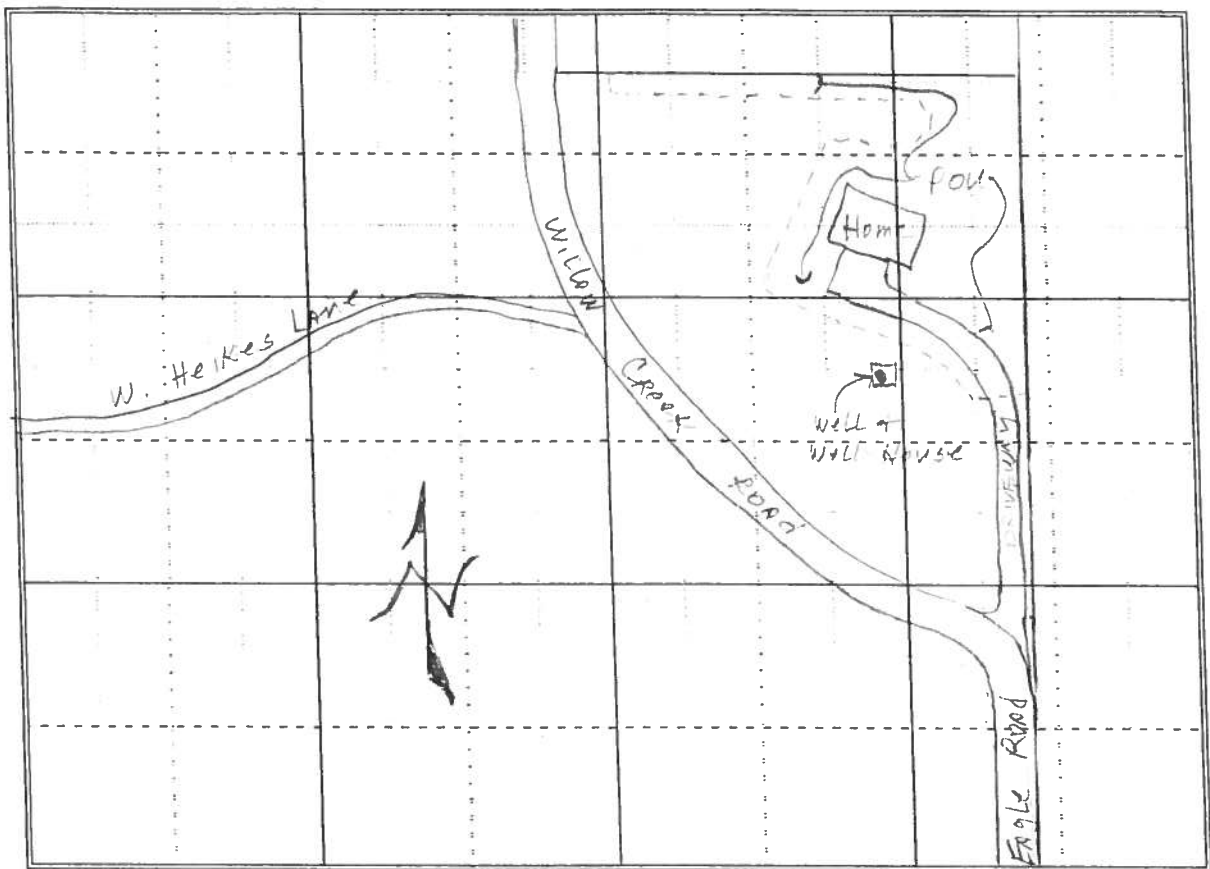
63-3586 & 63-11397



63-12021



3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe diameter (inside), as applicable. Use the space provided or ☐ see attached.



Scale: 1" = NTS

- ☐ Copy of USGS Quadrangle attached showing location(s) of point(s) of diversion and place(s) of use (required)
☒ Aerial photo attached (required for irrigation of 10+ acres)
☒ Photo of diversion and system attached

1734

REPORT OF WELL DRILLER State of Idaho

State law requires that this report shall be filed with the State Reclamation Engineer within 30 days after completion or abandonment of the well.

WELL OWNER:

Name L. Roy Sprague
Address Engle, Idaho

Owner's Permit No. 633493

NATURE OF WORK (check): Replacement well ☐
New well ☒ Deepened ☐ Abandoned ☐

Water is to be used for: irrigation

METHOD OF CONSTRUCTION: Rotary ☐ Cable ☒
Dug ☐ Other ☐

(explain)
CASING SCHEDULE: Threaded ☐ Welded ☐

12 "Diam. from 1 ft. to 2.35 ft.

"Diam. from ft. to ft.

"Diam. from ft. to ft.

"Diam. from ft. to ft.

Thickness of casing: 2.19 Material:

Steel ☒ concrete ☐ wood ☐ other ☐

(explain)
PERFORATED? Yes ☒ No ☐ Type of
perforator used: shop

Size of perforations: 1/8 " by 3 "

perforations from 210 ft. to 230 ft.

perforations from ft. to ft.

perforations from ft. to ft.

perforations from ft. to ft.

WAS SCREEN INSTALLED? Yes ☐ No ☒

Manufacturer's name Model No.

Type Diam. Slot size Set from ft. to ft.

Diam. Slot size Set from ft. to ft.

CONSTRUCTION: Well gravel packed? Yes ☒

No. ☐ size of gravel 1/2 Gravel

placed from 30 ft. to 235 ft. Surface seal

provided? Yes ☐ No ☐ To what depth?

 ft. Material used in seal:

Did any strata contain unusable water? Yes ☐

No. ☒ Type of water:

Depth of strata ft. Method of sealing

strata off:

Surface casing used? Yes ☐ No. ☐

Cemented in place? Yes ☐ No ☐

Locate well in section

Sec.

LOCATION OF WELL: County ADA
NE 1/4 NE 1/4 Sec. 32 T. 5 N. 1 R. 1 E. 1

Use other side for additional remarks

Size of drilled hole: 12 " Total
depth of well: 235 Standing water
level below ground: 14.5 Temp.
Fahr. Test delivery: none gpm
or cfs Pump? ☐ Bail ☐
Size of pump and motor used to make test:

Length of time of test: Hrs. Min.

Drawdown: ft. Artesian pressure: ft.

above land surface Give flow cfs

or gpm. Shutoff pressure:

Controlled by: Valve ☐ Cap ☐ Plug ☐

No control ☐ Does well leak around casing?

Yes ☐ No ☐

DEPTH MATERIAL 04301 WATER

FROM TO YES OR NO

FEET FEET

1 5 soil

5 135 cemented sand

135 194 cemented sand

194 213 some water

213 231 clay - hard some

231 235 gravel

231 235 coarse sand & water

231 235 clay

Received
Aug 8, 1967
P. J. B. B. B.

CECS

FIELD EXAM PHOTOS

Water Right Permit: 63-12021

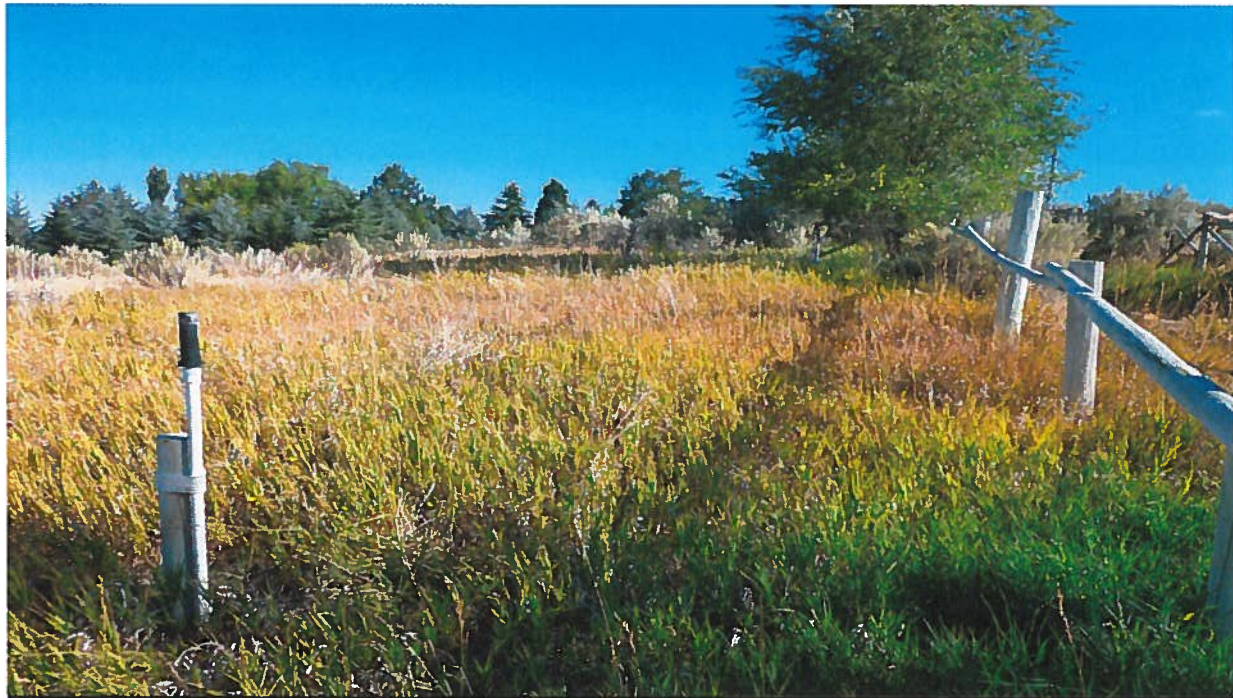
Field Exam Date: 7-26-12

PLS: NE1/4, NE1/4 Section 32, T.05N, R.01E.

Field Examiner: RC



Point of Diversion: Domestic, Irrigation, and Stock Water well, drilled in 1967, located in pump house south of the right holders home and driveway. A 1 ½ hp Jacuzzi submersible pump diverts water for domestic use, and a 7.5 hp submersible pump diverts water for irrigation and stock water.



Place of Use: View northerly of pasture and typical irrigation riser with rotary sprinkler.



Place of Use: View southerly of landscaped area near easterly property line.



Place of Use: View northeasterly of lawn and landscaping near home.