

STATE OF IDAHO  
DEPARTMENT OF WATER RESOURCES  
**BENEFICIAL USE FIELD REPORT**

**A. GENERAL INFORMATION**

Permit No: 65-13951

Exam Date: 9/20/2012

1. Current Owner: DONALD F BASSO  
56 DEER TRAIL  
GARDEN VALLEY ID 83622  
(208) 462-4286
- AND/OR
- PATRICIA A BASSO  
56 DEER TRAIL  
GARDEN VALLEY ID 83622  
(208) 462-4286
2. Accompanied by: Donald Basso  
Phone No: Same  
Address: Same  
Relationship to Permit Holder:

3. SOURCE TRIBUTARY  
UNNAMED STREAM WARM SPRINGS CREEK

**B. OVERLAP REVIEW**

1. Other water rights with the same place of use: 65-22942  
2. Other water rights with the same point of diversion: 65-22942

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

UNNAMED STREAM NE1/4SE1/4 Sec. 32, Twp 10N, Rge 04E, B.M.  
BOISE County

Method of Determination: Arc Map (Aerial Photo)

2.

**PLACE OF USE:** IRRIGATION

| Twp | Rge | Sec | NE |    |    |    | NW |    |    |    | SW |    |    |    | SE |    |    |    | Totals |
|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--------|
| 10N | 04E | 32  | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE | .1     |

Total Acres: 0.1

Method of Determination: Arc Map (Aerial Photo); Tax Lots.

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<br/>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<br/>Size</u> |
|--------------------------------------|-------------------|-----------|-------------------------|------------------|----------------------------------------------|
| N/A                                  | A.O. Smith        | 1.5       | C48L2EC11C3             | Simer            | (1 1/2")                                     |
|                                      |                   |           |                         |                  |                                              |
|                                      |                   |           |                         |                  |                                              |
|                                      |                   |           |                         |                  |                                              |

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

#### D. FLOW MEASUREMENTS

1.

| <u>Measurement<br/>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. Due to low water level in the unnamed stream, the right holder was unable to operate the irrigation system. Also, the right holder is not allowed to operate the irrigation system after the June 15th District 65 cutoff date.

#### E. FLOW CALCULATIONS

\_\_\_\_ Additional Computation Sheets Attached

Measured Method: (Theoretical Horsepower Equation)

$$Q = 8.8 \times 0.7 \times 1.5/30 + (2.31 \times 40) = 9.24/122.4 = 0.08 \text{ cfs}$$

$$Q(\text{theoretical}) = 0.08 \text{ cfs} > 0.02 \text{ cfs } Q(\text{permit})$$

$$HP = 1.5$$

$$P = 40 \text{ psi (Assumed)}$$

$$Z = 30' \text{ (Estimated)}$$

Appears that the current pumping system is capable of attaining the permit diversion rate of 0.02 cfs.

**F. VOLUME CALCULATIONS**

## 1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 0.10 \times 3.5 = 0.4 \text{ AFA}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.02 \times 214 \times 1.9835 = 8.5 \text{ AFA}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 0.4 \text{ AFA}$$

## 2. Volume Calculations for Other Uses: N/A

**G. NARRATIVE/REMARKS/COMMENTS****WATER SUPPLY SYSTEM:**

A 1 ½-hp pump, which is located in a small pump enclosure near an unnamed stream, diverts water from the stream to irrigate a small portion of lawn and landscaping adjacent to the unnamed stream. A 2' diameter sump, located upstream of a rock dam, collects water for pumping. The pump diverts water from the sump through a short section of 2" flexible hose. The pump discharges water through 1 ½" PVC pipe to an irrigation system concrete block distribution vault located next to the home.

**IRRIGATION SYSTEM:**

The lawn, landscaping, and garden areas within the right holder's parcel, are irrigated by a pressurized irrigation system with pop-up and rotary sprinkler heads. Water distribution to the lawn, landscaping, and garden areas is controlled by solenoid valves located in the distribution vault.

The diversion of water from the unnamed stream is controlled by the District 65 Watermaster and is terminated on June 15<sup>th</sup>. The right holder diverts water to two (2) 2,000 gallon fiberglass water storage tanks prior to June 15<sup>th</sup> to provide irrigation storage. (See Water Right Permit No. 65-22942 for the irrigation storage beneficial use).

**OVERLAP ANALYSIS:**

**Point of Diversion and Place of Use:** Water Right Permit No. 65-13951 and Water Right Permit No. 65-22942 use the same point of diversion and the same place of use for the irrigation of the right holder's parcel.

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

### RATE &/OR STORAGE RECOMMENDED FOR LICENSING

| Description               | Rate of Flow (cfs) |      | Storage (af) |
|---------------------------|--------------------|------|--------------|
| Permit Amount             | 0.02               | &/or | N/A          |
| Beneficial Use Limit      | 0.02               | &/or | N/A          |
| System Measurement        | 0.08(theoretical)  | &/or | N/A          |
| Proof Fee Amount          | 0.20               | &/or | N/A          |
| <b>Recommended Amount</b> | 0.02               | &/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            | 4/01 to 10/31        | 0.020 CFS             | 0.40 AFA             |
| <u>Totals:</u>        |                      | 0.020 CFS             | 0.40 AFA             |

##### 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    \_\_\_ Other

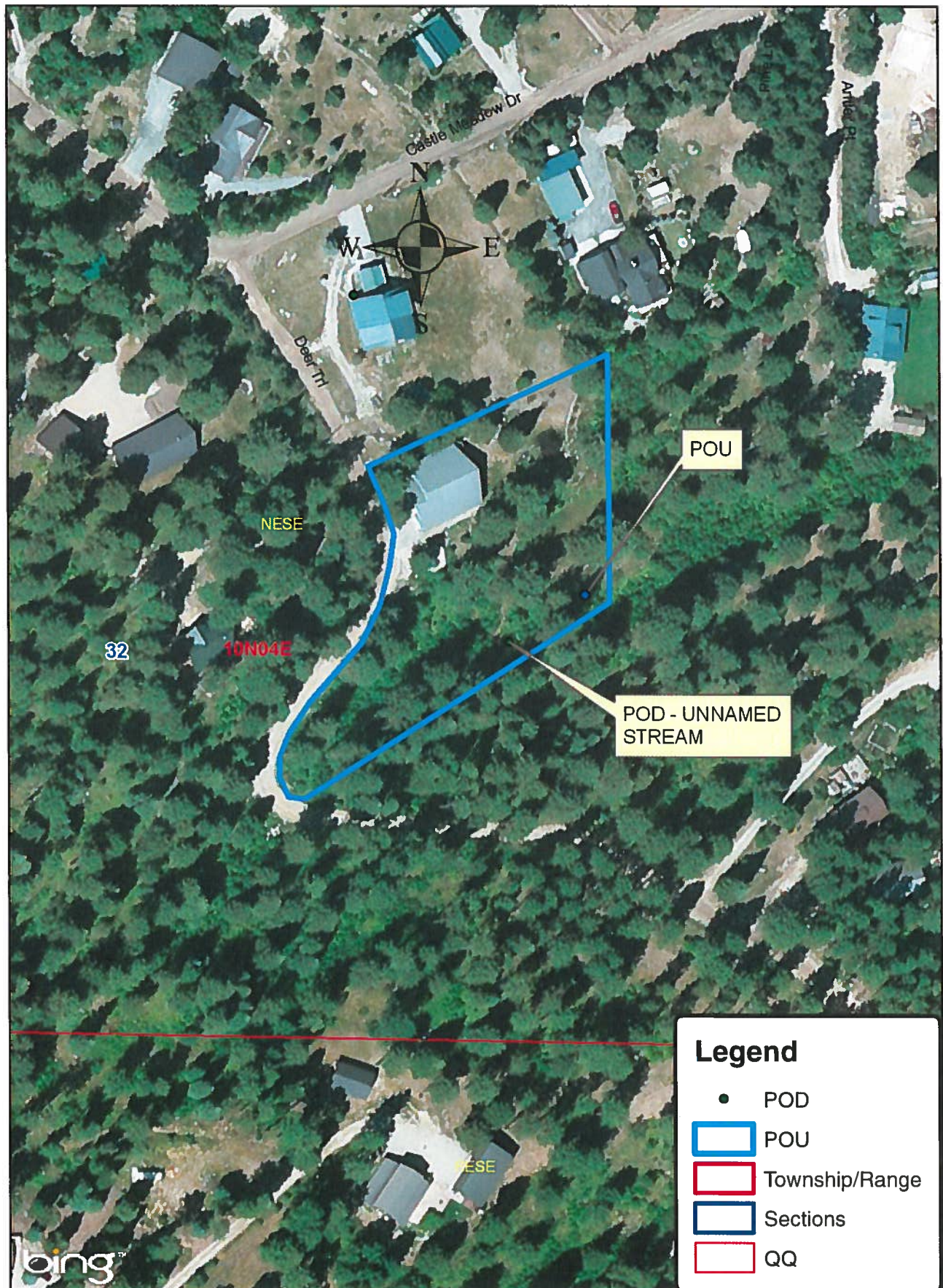
#### I. AUTHENTICATION

Field Examiner's Name Rick Collingwood Date 2/6/13

Reviewer \_\_\_\_\_ Date \_\_\_\_\_

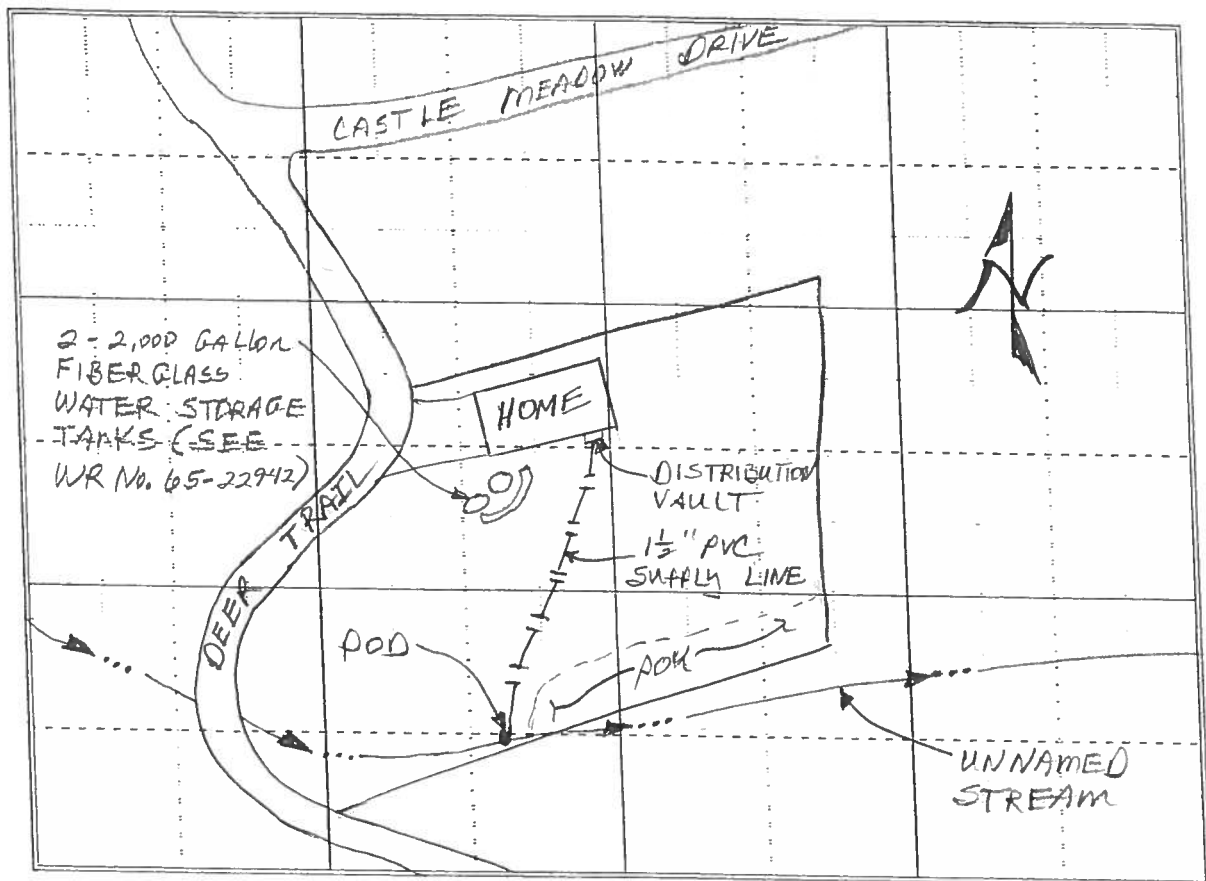
65-13951

BING AERIAL PHOTO - 2011



0 40 80 160 240 320 Feet

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

## **FIELD EXAM PHOTOS**

Water Right Permit: 65-13951

Field Exam Date: 9-20-12

PLS: NE1/4, SE1/4 Section 32, T.10N, R.04E.

Field Examiner: RC



Point of Diversion: View westerly of 2" flexible suction pipe extending from pump enclosure box to 24" diameter PVC cistern or sump in unnamed stream.



Point of Diversion: View into 24" diameter PVC cistern or sump of the 2" screened flexible suction pipe.



View inside of pump enclosure of the 2" flexible suction line from the unnamed stream and the 1 1/2 - hp pump and 1 1/2" PVC discharge line.



View of 1" PVC irrigation distribution main lines in a concrete block distribution vault next to the home. The 1/2-hp pump in the vault pumps water to two 2,000 gallon fiberglass water storage tanks (Water Right Permit No. 65-22942).



Place of Use: View northeasterly of the lawn and landscaping area irrigated from the unnamed stream.



## State of Idaho

# DEPARTMENT OF WATER RESOURCES

Western Region, 2735 Airport Way • Boise, Idaho 83705-5082

Phone: (208) 334-2190 • Fax: (208) 334-2348 • Web Site: [www.idwr.idaho.gov](http://www.idwr.idaho.gov)

C. L. "BUTCH" OTTER  
Governor

GARY SPACKMAN  
Interim Director

September 13, 2012

Donald F. & Patricia A. Basso  
56 Deer Trail  
Garden Valley, ID 83622

### **RE: Scheduling Field Exam for Water Right Permit No. 65-13951**

We are planning to **conduct water right field examinations** in the vicinity of the above-referenced permit **during the week of September 24, 2012**. An examination is needed to verify your water use in order to issue a water right license.

Please be advised that you will need to operate your system under normal operating conditions during the examination. The permit authorizes the diversion of 0.02 cfs from an Unnamed Stream for irrigation of 0.1 acres.

In order to conduct your exam as efficiently as possible, we ask that you call this office to schedule a day and time convenient for you. **Please call me at 208-334-2190 by September 21, 2012, to conduct the exam during the week of September 24, 2012.** If there is a problem with scheduling or conducting the examination at this time, please let me know so we can reschedule or make other arrangements.

I appreciate your attention to this matter and I look forward to hearing from you.

Sincerely,

A handwritten signature in black ink that reads "Rick Collingwood". The signature is written in a cursive, flowing style.

Rick Collingwood, P.E.  
Water Resource Agent, Sr.