

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

### A. GENERAL INFORMATION

Permit No: 37-8878

Exam Date: 7/25/2008

and confirmed the system information by phone on 5/24/12.

1. Current Owner: LESLEY ANDRUS  
35 GREENHORN RD  
HAILEY ID 83333  
(208)788-4600

2. Accompanied by: Lesley

- | 3. <u>SOURCE</u> | <u>TRIBUTARY</u> |
|------------------|------------------|
| SPRING           | SNAKE RIVER      |

## B. OVERLAP REVIEW

1. Other water rights with the same place of use: NONE
2. Other water rights with the same point of diversion: NONE

### C. DIVERSION AND DELIVERY SYSTEM

**1. LOCATION OF POINT(S) OF DIVERSION:**

SPRING L6 SE1/4SW1/4SE1/4 Sec. 7, Twp 06S, Rge 13E, B.M. GOODING County

#### Method of Determination: Field Examination

2. PLACE OF USE: DOMESTIC

[illegible]

**Method of Determination:** Aerial photography and taxlot data

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

| <u>Well or Diversion</u> | <u>Motor Make</u> | <u>Hp</u> | <u>Motor Serial #</u> | <u>Pump Make</u> | <u>Pump Serial No/Discharge Size</u> |
|--------------------------|-------------------|-----------|-----------------------|------------------|--------------------------------------|
| <u>ID No.*</u>           |                   |           |                       |                  |                                      |
| STA-RITE PROJ            | 1                 | C48L2EC15 | STA-RITE              | HNE-L            |                                      |

4.

**D. FLOW MEASUREMENTS**

1.

**Measurement**

| <u>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—no measurement taken, this can be licensed pursuant to Beneficial Use Admin. Rule #35.01.r

2. Measurements: Was unable to obtain measurement due to system not functioning. ~Nick Van Dyke

**E. FLOW CALCULATIONS**

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

Measured Method: I will use a hp equation to calculate a system capacity as follows

TDH= 70.54

Depth to water= the pump is located at the house, I looked at Google Earth to obtain elevation of the PD and the house and found a difference of 20' downhill. It appears that the water is pumped into the system near the floor of the basement. The water is then plumbed to the sprinkler system and into the house using pressure tanks. The depth to water is 0 for hp equation purposes.

PSI= 30 psi

Friction Losses= 125'-1 ½' hose from the PD to the house is 1.24' (see attached worksheet)

hp = 1

 $8.8 \times 0.7 \times 1 / (2.31 \times 30) + 1.24 = 6.16/70.54 = 0.09 \text{ cfs}$ **The duty of water for one home is limited to 0.04 cfs****F. VOLUME CALCULATIONS**

1. Volume Calculations for Irrigation: N/A—the right holder irrigates less than ½ acre.

2. Volume Calculations for Other Uses: Domestic—standard volume for one single family home and irrigation of lawn is 1.2 af.

**G. NARRATIVE/REMARKS/COMMENTS**

This right was examined in 2008. At that time the system was not operable because the spring water was insufficient. In 2005/2006 the right holder installed a well because the spring was not reliable for domestic water. Even though a well was installed and primarily provides water for the domestic use, the spring system was installed and beneficially used according to the permit holder during the development period of the permit. A license should be granted to the permit holder in accordance with the permit.

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> |
|-----------------------|----------------------|-----------------------|----------------------|
| Domestic              | 1/1 to 12/31         | 0.04 CFS              | 1.2 AF               |
| Total                 |                      | 0.04 CFS              | 1.2 AF               |

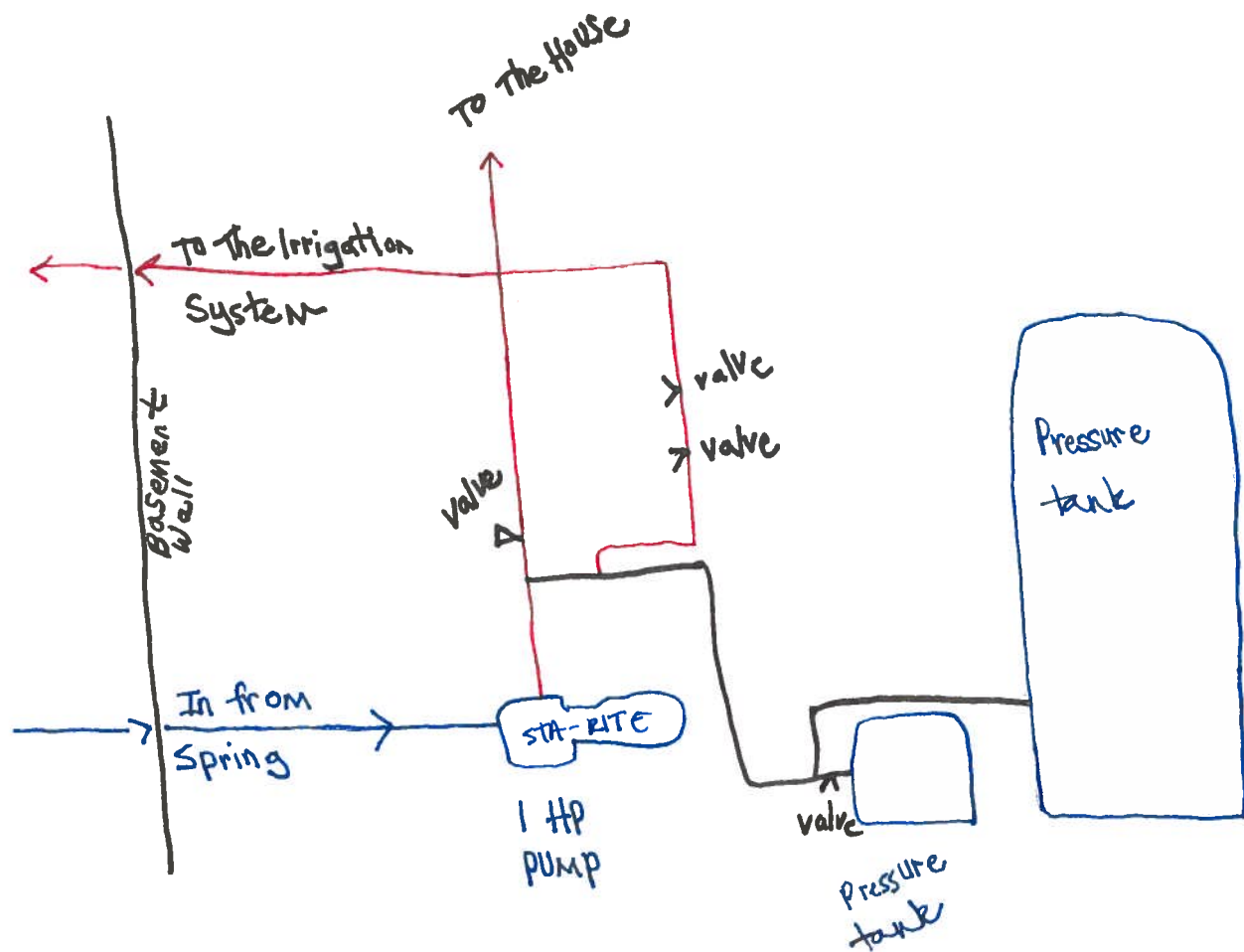
**2. Recommended Amendments**

\_\_\_\_ Change P.D. as reflected above \_\_\_\_ Add P.D. as reflected above ☒ None

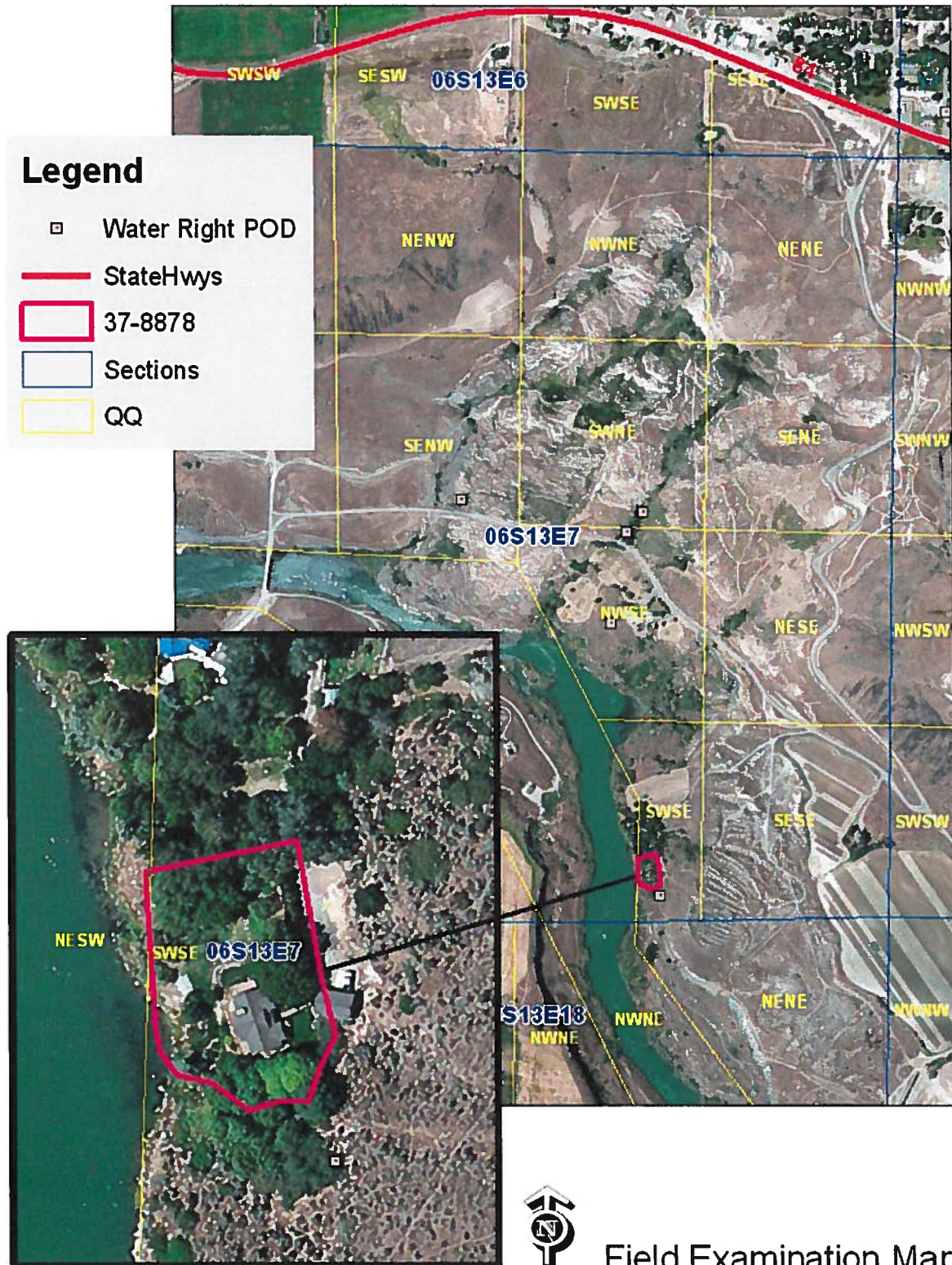
\_\_\_\_ Change P.U. as reflected above \_\_\_\_ Add P.U. as reflected above \_\_\_\_ Other

**I. AUTHENTICATION**Field Examiner's Name Cherie Palmer Date 5/25/12

*Nick VanDyke*  
 Attachment #1 - Hazen worksheet  
 Attachment #2 - overlap analysis  
 Attachment #3 - Proof report of overlap

System DiagramSystem Notes

- It appears that all piping is 1/4" in size
- the small pressure tank is for the irrigation system
- It's not sure if the well is diverted through the system above
- beneficial use did occur during the development, evidenced by the system that is still in place.

Map/Aerial Photo

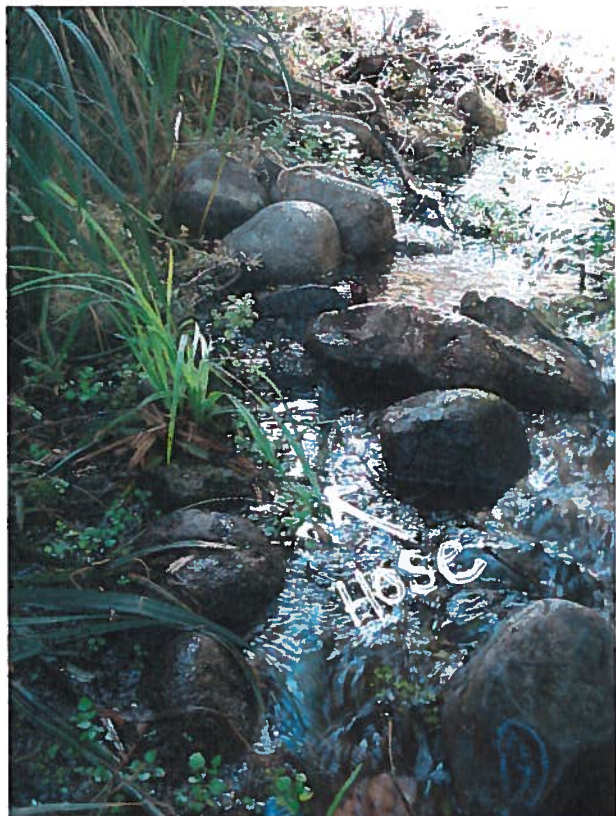
Photos



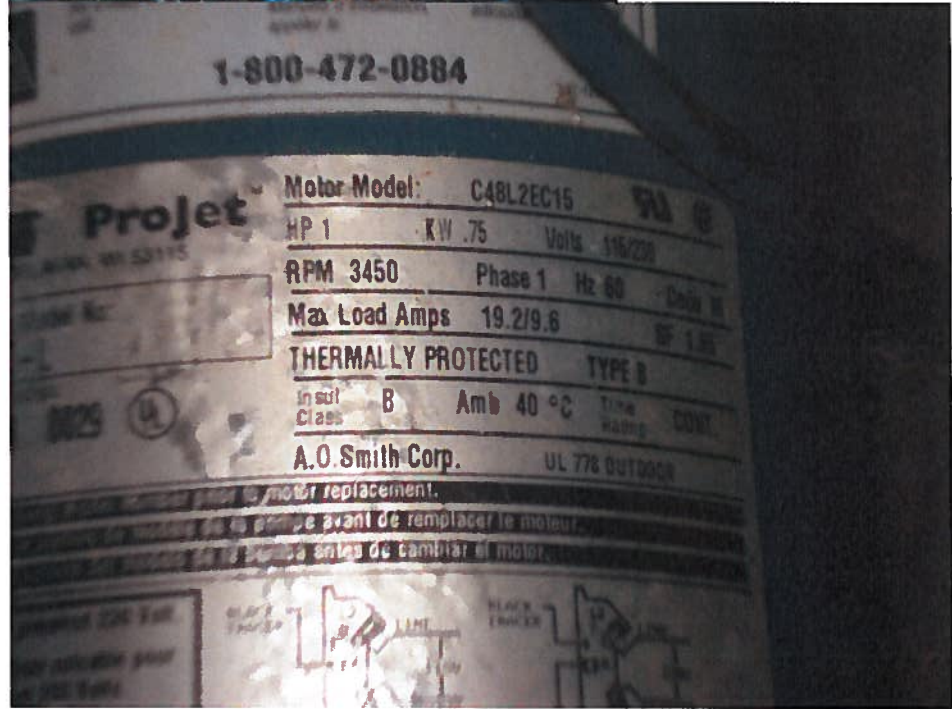
POU - lawn irrigation



- hose in spring that  
goes from intake to  
the pump



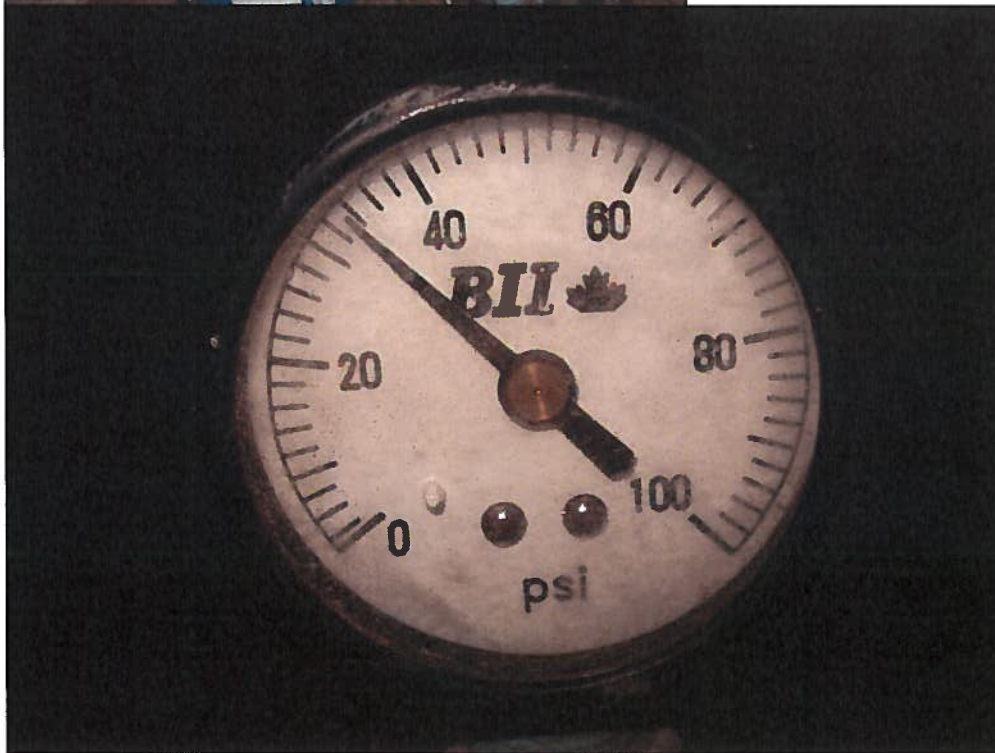
Spring (source) with  
hose submerged



Pump Info.



System





Pressure tank  
for the irrigation  
system



POV



← Snake River  
POV



POV



POV



POV



POV



POV



P00

# Hazen-Williams Equation for Pressure Loss in Pipes - worksheet Attachment #1

## Imperial Units

### Specified Data

|                                               |       |
|-----------------------------------------------|-------|
| $l$ = length of pipe (ft)                     | 125   |
| $c$ = Hazen-Williams roughness constant       | 150   |
| $q$ = volume flow (gal/min)                   | 18    |
| $d_h$ = inside or hydraulic diameter (inches) | 1 1/2 |

### Calculated Pressure Loss

|                                                                                                      |      |
|------------------------------------------------------------------------------------------------------|------|
| $f$ = friction head loss in feet of water per 100 feet of pipe (ft H <sub>2</sub> O per 100 ft pipe) | 2.89 |
| $f$ = friction head loss in psi of water per 100 feet of pipe (psi per 100 ft pipe)                  | 1.24 |

|                                 |      |
|---------------------------------|------|
| Head loss (ft H <sub>2</sub> O) | 3.61 |
| Head loss (psi)                 | 1.55 |

### Calculated Flow Velocity

|                            |      |
|----------------------------|------|
| $v$ = flow velocity (ft/s) | 3.27 |
|----------------------------|------|

# Overlap Analysis for 37-8878 for Lesley Andrus

Attachment #2

| Type   | WR #      | Owner                            | Source  | TRS     | SWSE | Significant y/n?                    |
|--------|-----------|----------------------------------|---------|---------|------|-------------------------------------|
| Permit | 37 8878   | LESLEY ANDRUS,                   | SPRING  | 06S13E7 | X    |                                     |
| Permit | 37 22573  | THOMAS E KING,                   | UNNAMED | 06S13E7 | X    | n-different lot                     |
| Right  | 37 790    | FRED G BLISS,                    | SPRINGS | 06S13E7 | X    | n-not active, see 37-21753/54       |
| Right  | 37 10398B | THOMAS E KING,                   | SPRING  | 06S13E7 |      | 3.3 n-different lot                 |
| Right  | 37 21753  | A GERILYN FEUSTEL, WILLIAM I FEU | SPRING  | 06S13E7 |      | 4.2 y-partially within the same lot |
| Right  | 37 21754  | FREDERICK W GOERISCH, INNA E G   | SPRING  | 06S13E7 |      | 2.1 n-different lot                 |

Conclusion: Water right 37-21753 is for irrigation and stockwater purposes for 4.2 acres and 0.08 cfs.  
It appears that the permit holder may own part of 37-21753 and will be notified when the license is issued.  
There are no rights that share the PD of this permit.

IDAHO DEPARTMENT OF WATER RESOURCES  
Water Right Report 37-21753

Attachment #3

WATER RIGHT NUMBER: 37-21753

|                   |                         |
|-------------------|-------------------------|
| <u>Owner Type</u> | <u>Name and Address</u> |
| Current Owner     | A GERILYN FEUSTEL       |
| Current Owner     | WILLIAM I FEUSTEL       |

Priority Date: 04/01/1888

Basis: Decreed

Status: Active

|               |                  |
|---------------|------------------|
| <u>Source</u> | <u>Tributary</u> |
| SPRING        | SNAKE RIVER      |

|                         |             |           |                       |                      |
|-------------------------|-------------|-----------|-----------------------|----------------------|
| <u>Beneficial Use</u>   | <u>From</u> | <u>To</u> | <u>Diversion Rate</u> | <u>Annual Volume</u> |
| IRRIGATION              | 03/15       | to 11/15  | 0.080 CFS             |                      |
| STOCKWATER              | 01/01       | to 12/31  | 0.010 CFS             |                      |
| <u>Total Diversion:</u> |             |           | 0.080 CFS             |                      |

Location of Point(s) of Diversion

SPRING NE1/4NW1/4NW1/4 Sec. 17, Twp 06S, Rge 13E, B.M.  
GOODING County

Place of Use

|             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |        |
|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--------|
| IRRIGATION  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |        |
| Twp Rge Sec |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |        |
| 06S 13E 7   | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE | Totals |
|             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | 4.2    |
|             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | L 6    |

Total Acres: 4.2

STOCKWATER same as IRRIGATIONConditions of Approval:

1. N05 The quantity of water under this right for stockwater use shall not exceed 13,000 gallons per day.
2. C18 This partial decree is subject to such general provisions necessary for the definition of the rights or for the efficient administration of the water rights as may be ultimately determined by the Court at a point in time no later than the entry of a final unified decree. Section 42-1412(6), Idaho Code.
3. B01 Source is also known as Montana Mining Company Ditch Spring No. 11.
4. N15 The appropriator is entitled to the quantity of water described for stockwater purposes at a point of measurement where the delivery ditch enters the place of use described.
5. This right is a split from former right 37-10398A.
6. N08 The quantity of water decreed for this water right for stockwater use is not a determination of historical beneficial use.

Comments:

1. csaxton 1/20/2011 Conversation memo  
Comment: I spoke with Gerilyn Feustel this morning. She had received water district notice letter regarding water right 37-21753. She does not own the property anymore and wanted to know what to do. In our conversation, it did not sound like Ms. Feustel held the water right when selling the property, but she does not know for sure. I told her if she did not think she withheld the water right, then there was nothing she needed to do and the new property owner would need to file a change of ownership. She said she was going to let it go and not pursue determining if she withheld the water right (csaxton 1-20-11)

Dates and Other Information:

Decreed Date: 9/29/2006