

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

**A. GENERAL INFORMATION**

**Permit No:** 37-8057  
**Exam Date:** 06/24/2022

## 1. Current Owner:

STROM RANCHES INC  
PO BOX 137  
HILL CITY ID 83337-0137

## 2. Accompanied by: Corey King, IDWR; Brycen Strom, Vice President of Strom Ranches, Inc.

Phone No: 702-467-2665

Address: 1399 W US 20, Hill City, ID 83337

Relationship to permit Holder:

3. **SOURCE:**

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: None

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

GROUND WATER SW¼ NE¼, Sec. 31, Twp 01S, Rge 12E, B.M. CAMAS County

GROUND WATER SW¼ NE¼, Sec. 31, Twp 01S, Rge 12E, B.M. CAMAS County

Method of Determination: ArcMap imagery; Field exam site visit.

**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 |        |
| 01S | 12E | 31  | 0.8 | 20.1 | 40.0 | 8.6 | 11.1 |    |    | 32.0 | 8.6 |    |    |    | 0.3 | 16.6 |    |    | 138.1  |

Total Acres: 138.1

Method of Determination: ArcMap aerial imagery.

3.

Delivery System Diagram Attached (required). Indicate all major components and distances between components.

  X   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.

  X    X   Aerial Photo Attached (required for irrigation of 10+ acres).  X   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 |
|---------------------------|------------|-----|------------------|-----------|-----------------------------------|
| New well                  |            | 100 |                  |           |                                   |
| Original well             |            |     |                  |           | No pump installed                 |

**D. FLOW MEASUREMENTS**

1.

| Measurement Equipment | Type       | Make | Model No. | Serial No. | Size | Calib. Date  |
|-----------------------|------------|------|-----------|------------|------|--------------|
| Flow meter            | Ultrasonic | GE   | PT878     |            |      | Spring, 2022 |

2. Measurements: Corey King did a ten minute measurement with the portable flowmeter. The highest observed flow rate was 543.3 gallons per minute (1.21 cfs).

**E. FLOW CALCULATIONS**

Additional Computation Sheets Attached

Measured Method: The highest observed flow rate was 543.3 gallons per minute (1.21 cfs).

**F. VOLUME CALCULATIONS**

1. Volume Calculations for irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 100 \times 3.5 \text{ AF/acre} = 350.0 \text{ AF}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 1.21 \text{ cfs} \times 200 \text{ days} \times 1.9835 = 480.0 \text{ AF}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 350.0 \text{ AF}$$

2. Volume Calculations for Other Uses: NA

**G. NARRATIVE/REMARKS/COMMENTS**

The field exam for permit 37-8057 was conducted on June 24, 2022 with IDWR Water Resource Agent Corey King and Brycen Strom, the Vice President of Strom Ranches, Inc. in attendance. Mr. King made a flow rate measurement, we took photos, and we made a side trip to the location of the POU of the right offered for mitigation for permit 37-8057.

Application for permit 37-8057 was filed on November 3, 1982, was advertised, and protested. Due to many delays, including the Swan Falls litigation, the application process was halted until a hearing was held on April 19, 1994. As a result of the hearing, a final order approving the application for permit was issued on September 8, 1994, which made the well usage contingent on the flow in Wild Horse Creek, using Strom Ranches, Inc. irrigation water right 37-2001 from Wild Horse Creek as mitigation for the application. Other conditions of approval were included in the order. The final order was appealed by Strom Ranches, Inc., but was affirmed by the district court in October of 1995.

On April 23, 1996 the Department approved an Extension of Time to Submit Proof of Beneficial Use. The cover letter with the Extension highlighted certain conditions of approval from the September 8, 1994 order, but also gave the permit holder the opportunity to propose a different plan which could be acceptable to the Department.

A May 26, 1996 letter from Strom Ranches, Inc., gave several proposed conditions in response to the Department's April 23, 1996 letter. Among the conditions proposed were:

- Use of US-20 Wild Horse Creek roadway culvert as a flow rate weir.
- Bi-Weekly monitoring.
- Strom well pump will be equipped with a cumulative flow meter.
- Low flow water must accumulate prior to an equivalent well usage period.
- Well pump halted for the season when Wild Horse Creek stops flowing.
- No water rights below affected.
- Records maintained by Strom Ranches, Inc. available to the Department upon demand.

The Department responded to the Strom Ranches, Inc. proposal by stating that, in general, the proposals were acceptable to the Department. This timeline gives an overview of the development of the conditions of approval which will be placed on the licensed right.

The original well for the permit was drilled in 1982 and apparently did not produce enough water, so the second well was drilled in 2015. The second well doesn't pump enough water to keep the pivot running constantly, so the well is kept running 24/7 during the times the pivot needs irrigation, but the pivot is shut off from about 11 AM until approximately 7 PM daily to allow the pond to refill, according to Mr. Strom. The original well is currently not in use, but has been used in the past, and the Stroms wish to keep both wells as authorized PODs in order to have the ability to keep the pivot running constantly when the wells are pumping.

Water from the 2015 well (and potentially the 1982 well) is pumped via pipeline into the regulating pond where it accumulates and is then pumped via pipeline out to the pivot (9 towers, no endgun). On the day of the field exam, we measured a high flow rate of 543.3 gallons per minute (**1.21 cfs**), which is the recommended flow rate for licensing. The recommended volume of **350.0 AF** was calculated by multiplying the permitted irrigation acres (100.0) by the field headgate requirement (3.5 AF/acre).

In confirming compliance with permit conditions of approval, we checked the POU for mitigation right 37-2001, and it was not being irrigated, nor did there appear to be any method of irrigation present. Water was flowing in Wild Horse Creek, although it was only about 0.5 cfs. The culvert where Wild Horse Creek flows under U.S. Highway 20 is still in place and could still be used to measure flows in the creek as proposed in the May 26, 1996 letter from Strom Ranches, Inc to IDWR. A Seametrics AG-2000-800 flowmeter is installed on the 2015 well and appears to be in good working condition. The other conditions of approval appear to have been complied with.

The irrigation occurring under this 100.0 acre permit is within a 138.1 acre system. Strom Ranches, Inc. holds a Water Supply Bank Rental agreement which runs through 2024 for 136.0 acres. To accommodate the possibility that the 100 acres under this permit could be irrigated anywhere within the 138.1 acres that are irrigated, a 138.1 acre permissible place of use (PPU) will be created, with right 37-8057 authorized to irrigate 100.0 acres within the PPU.

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> | <u>Volume</u> |
|-----------------------|----------------------|--------------------------|---------------|
| IRRIGATION            | 4/15 to 10/31        | 1.21 CFS                 | 350.0 AF      |

Totals:

1.21 CFS

350.0 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 ☐ None

#### I. AUTHENTICATION

Field Examiner's Name

  
Jim Bitzenburg, IDWR

Date

8-3-2022

Reviewer

Date



Original POD drilled in 1982

POD drilled in 2015



37-8057 Strom Ranches, Inc.



Regulating pond with water from the 2015 POD flowing in (red arrow)

Pump and pipeline from pond to pivot



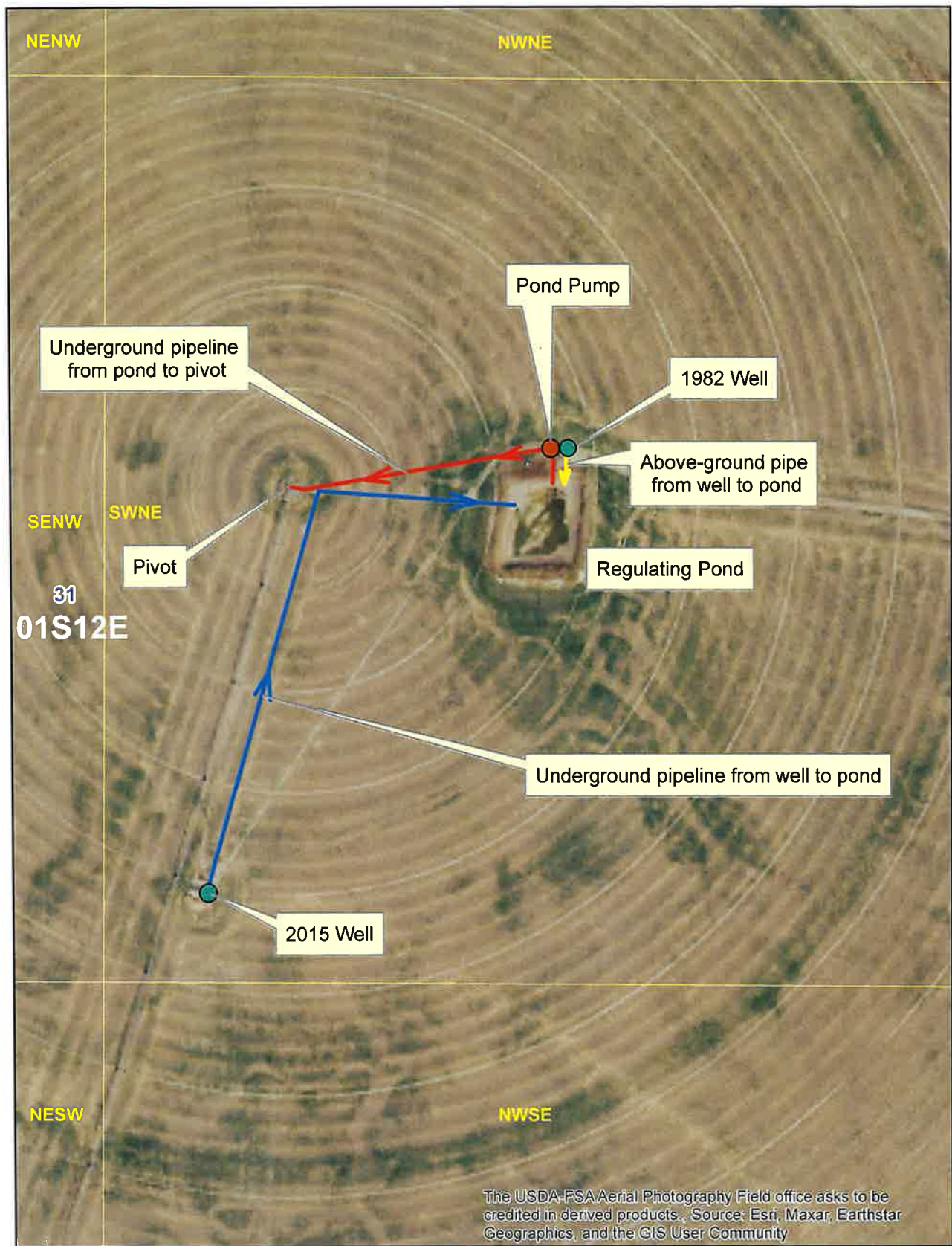


POU – Pivot irrigating hay field

Photo of IDWR flowmeter showing highest measured flow rate

| Time     | Velocity<br>ft/s | Volume<br>Gallons/min |
|----------|------------------|-----------------------|
| 06/24/22 |                  | 543.3                 |
| 10:35:02 | 3.69             | 535.1                 |
| 10:36:03 | 3.63             | 522.0                 |
| 10:37:02 | 3.54             | 521.5                 |
| 10:38:02 | 3.54             | 515.0                 |
| 10:39:04 | 3.49             | 515.3                 |

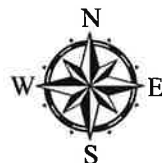
# System Diagram - Permit 37-8057 Strom Ranches, Inc.



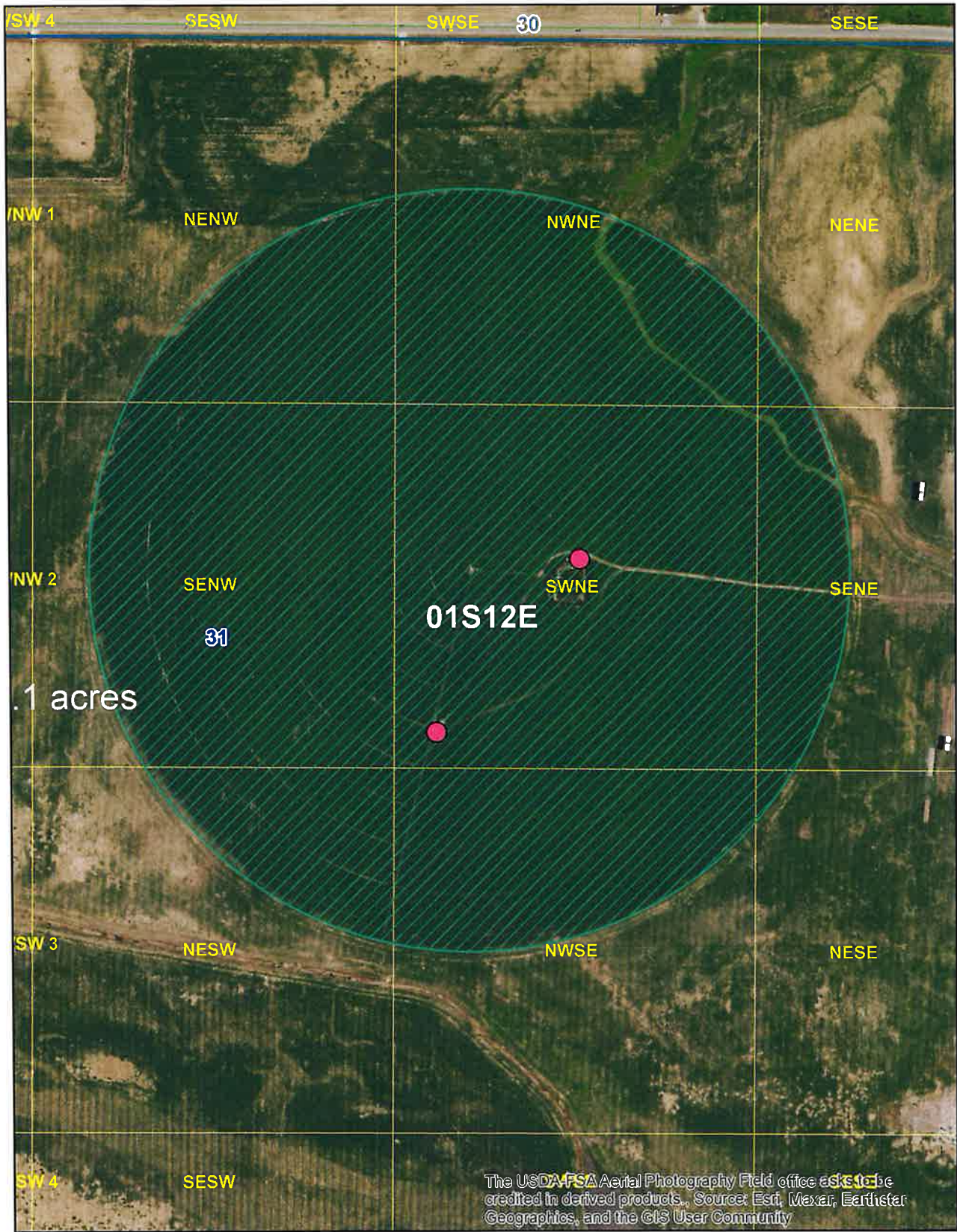
## Legend

- Township/Range
- Sections
- QQ

0 0.02 0.04 0.08 Miles

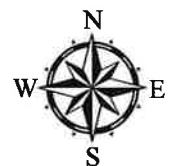


# Strom Ranches, Inc. - 37-8057



## Legend

- Township/Range
  - Sections
  - Points of Diversion
  - Place of Use
- QQ
- 0 0.05 0.1 0.2 Miles



IDAHO DEPARTMENT OF WATER RESOURCES  
WELL DRILLER'S REPORT

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DEPT OF WATER RESOURCES  
SOUTHERN REGION

## 1. WELL TAG NO. D D0070164

Drilling Permit No. 874940

Water right or injection well # \_\_\_\_\_

## 2. OWNER: Strom Ranches Inc.

Name Dennis StromAddress PO Box 137City Hill City State Idaho Zip 83337

## 3. WELL LOCATION:

Twp. 1501 North ☐ or South ☒ Rge. 12 East ☒ or West ☐Sec. 31 1/4 SW 1/4 NE 1/4Gov't Lot \_\_\_\_\_ County CamasLat. N43 17.535 (Deg. and Decimal minutes)Long. W115 4.605 (Deg. and Decimal minutes)

Address of Well Site \_\_\_\_\_

City Hill City

Lot \_\_\_\_\_ Blk. \_\_\_\_\_ Sub. Name \_\_\_\_\_

## 4. USE:

☐ Domestic ☐ Municipal ☐ Monitor ☒ Irrigation ☐ Thermal ☐ Injection  
☐ Other \_\_\_\_\_

## 5. TYPE OF WORK:

☒ New well ☐ Replacement well ☐ Modify existing well  
☐ Abandonment ☐ Other \_\_\_\_\_

## 6. DRILL METHOD:

☐ Air Rotary ☒ Mud Rotary ☐ Cable ☐ Other \_\_\_\_\_

## 7. SEALING PROCEDURES:

| Seal material   | From (ft) | To (ft) | Quantity (lbs or ft <sup>3</sup> ) | Placement method/procedure |
|-----------------|-----------|---------|------------------------------------|----------------------------|
| Bentonite grout | 0         | 250     | 6.1yds                             | pumped w/trimm             |
|                 |           |         |                                    |                            |

## 8. CASING/LINER:

| Diameter (nominal) | From (ft) | To (ft) | Gauge/Schedule | Material | Casing                              | Liner                    | Threaded                 | Welded                              |
|--------------------|-----------|---------|----------------|----------|-------------------------------------|--------------------------|--------------------------|-------------------------------------|
| 16                 | 0         | 295     | .375           | steel    | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 16                 | 355       | 415     | .375           | steel    | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 16                 | 455       | 475     | .375           | steel    | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Was drive shoe used? ☐ Y ☒ N Shoe Depth(s) \_\_\_\_\_

## 9. PERFORATIONS/SCREENS:

Perforations ☐ Y ☒ N Method \_\_\_\_\_Manufactured screen ☒ Y ☐ N Type JohnsonMethod of installation set in

| From (ft) | To (ft) | Slot size | Number/ft | Diameter (nominal) | Material | Gauge or Schedule |
|-----------|---------|-----------|-----------|--------------------|----------|-------------------|
| 295       | 355     | 40        |           | 16                 | SS       | .375              |
| 415       | 455     | 40        |           | 16                 | SS       | .375              |
| 475       | 575     | 40        |           | 16                 | SS       | .375              |

Length of Headpipe \_\_\_\_\_ Length of Tailpipe \_\_\_\_\_

Packer ☐ Y ☒ N Type \_\_\_\_\_

## 10. FILTER PACK:

| Filter Material | From (ft) | To (ft) | Quantity (lbs or ft <sup>3</sup> ) | Placement method |
|-----------------|-----------|---------|------------------------------------|------------------|
| sand pack 6-9   | 250       | 575     | 8.3yds                             | tagged in        |

## 11. FLOWING ARTESIAN:

Flowing Artesian? ☐ Y ☒ N Artesian Pressure (PSIG) \_\_\_\_\_Describe control device flat plate

## 12. STATIC WATER LEVEL and WELL TESTS:

Depth first water encountered (ft) \_\_\_\_\_ Static water level (ft) 18Water temp. (°F) 56 Bottom hole temp. (°F) \_\_\_\_\_

Describe access port \_\_\_\_\_

## Well test:

| Drawdown (feet) | Discharge or yield (gpm) | Test duration (minutes) | Pump                     | Boiler                   | Air                      | Flowing artesian         |
|-----------------|--------------------------|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| N/A             |                          |                         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Water quality test or comments: \_\_\_\_\_

## 13. LITHOLOGIC LOG and/or repairs or abandonment:

| Bore Dia. (in) | From (ft) | To (ft) | Remarks, lithology or description of repairs or abandonment, water temp. | Water |   |
|----------------|-----------|---------|--------------------------------------------------------------------------|-------|---|
|                |           |         |                                                                          | Y     | N |
| 20             | 0         | 12      | Sticky Brown Clay                                                        |       |   |
| 20             | 12        | 19      | Sticky blue clay                                                         |       |   |
| 20             | 19        | 23      | salty blue clay                                                          |       |   |
| 20             | 23        | 34      | blue sand and pea gravel                                                 |       |   |
| 20             | 34        | 37      | silty blue clay                                                          |       |   |
| 20             | 37        | 40      | sticky blue clay                                                         |       |   |
| 20             | 40        | 42      | fine blue sand                                                           |       |   |
| 20             | 42        | 56      | sticky blue clay                                                         |       |   |
| 20             | 56        | 77      | blue sand and silt                                                       |       |   |
| 20             | 77        | 93      | sticky blue clay                                                         |       |   |
| 20             | 93        | 102     | silty blue clay                                                          |       |   |
| 20             | 102       | 116     | sticky blue clay                                                         |       |   |
| 20             | 116       | 173     | silty blue clay                                                          |       |   |
| 20             | 173       | 186     | sticky blue clay                                                         |       |   |
| 20             | 186       | 198     | coarse quartz sand and pea gravel                                        |       |   |
| 20             | 198       | 204     | coarse sand with light gray clay                                         |       |   |
| 20             | 204       | 217     | weathered cinders                                                        |       |   |
| 20             | 217       | 222     | black basalt                                                             |       |   |
| 20             | 222       | 224     | fractured basalt                                                         |       |   |
| 20             | 224       | 276     | sandstone                                                                |       |   |
| 20             | 276       | 291     | blue sand and gravel                                                     |       |   |
| 20             | 291       | 305     | sandstone                                                                |       |   |
| 20             | 305       | 326     | fractured brown sandstone                                                |       |   |
| 20             | 326       | 329     | brown and quartz sandstone                                               |       |   |
| 20             | 329       | 346     | Hard gray granite                                                        |       |   |
| 20             | 346       | 377     | fractured brown granite                                                  |       |   |
| 20             | 377       | 422     | solid gray granite                                                       |       |   |
| 20             | 422       | 426     | decomposed granite with gray clay                                        |       |   |
| 20             | 426       | 442     | solid hard granite pink                                                  |       |   |
| 20             | 442       | 453     | salt and pepper granite                                                  |       |   |
| 20             | 453       | 474     | granite sand                                                             |       |   |
| 20             | 474       | 478     | hard gray granite                                                        |       |   |

Completed Depth (Measurable): 580Date Started: Oct 6, 2015Date Completed: Nov 2, 2015

## 14. DRILLER'S CERTIFICATION:

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Treasure Valley Drilling Co. No. 560Principal Driller [Signature] Date 12-11-15Driller [Signature] Date 12-10-15

Operator II \_\_\_\_\_ Date \_\_\_\_\_

Operator I [Signature] Date 12-10-15

Signature of Principal Driller and rig operator are required.

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WATER RESOURCES  
SOUTHERN REGION

076974



FEB 7 1969 State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

JAN 24 1983

Signed by (Firm Official) John J. Brown  
and  
(Operator) Frank Christman

USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DEPARTMENT