

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

**A. GENERAL INFORMATION**

Permit No: 57-11711

Exam Date: July 12, 2012

1. Current Owner: HART CREEK RANCH LLC  
24597 COLLETT RD  
OREANA ID 83650  
(208)834-2595
2. Accompanied by: Lorna Steiner and Mike Van  
Phone No: 208-834-2595  
Address: same as above  
Relationship to Permit Holder: Owner & Manager

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: 57-2271, 57-2278

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

|              |            |                                 |               |
|--------------|------------|---------------------------------|---------------|
| GROUND WATER | SW1/4SW1/4 | Sec. 25, Twp 04S, Rge 01W, B.M. | OWYHEE County |
| GROUND WATER | SW1/4SE1/4 | Sec. 26, Twp 04S, Rge 01W, B.M. | OWYHEE County |

Method of Determination: GPS and visual inspection

2.

PLACE OF USE: IRRIGATION

| Twp | Rge | Sec | NE |    |    |    | NW |    |    |    | SW |    |    |    | SE |    |    |    | Totals |
|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--------|
|     |     |     | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE | NE | NW | SW | SE |        |
| 04S | 01W | 25  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | 22.0   |

Total Acres: 22

Method of Determination: GIS and visual inspection.

3. YES Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
- YES Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
- YES Aerial Photo Attached (required for irrigation of 10+ acres).
- YES Photo of Diversion and System Attached

4.

| Well or Diversion Identification No.* | Motor Make               | Hp  | Motor Serial No. | Pump Make | Pump Serial No. or Discharge Size |
|---------------------------------------|--------------------------|-----|------------------|-----------|-----------------------------------|
| Site Tag #<br>A00016965               | High Trust<br>Electrical | 200 |                  | Peerless  | 250879<br>12.8" discharge         |
| Site Tag #<br>A00016966               | High Trust<br>Electrical | 150 | ALJ115154        |           | 12" discharge                     |

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

#### D. FLOW MEASUREMENTS

1.

| Measurement Equipment | Type      | Make | Model No. | Serial No. | Size | Calib. Date |
|-----------------------|-----------|------|-----------|------------|------|-------------|
| Thyme Flyte           | Polysonic |      |           |            |      | 3/28/2012   |
|                       |           |      |           |            |      |             |

2. Measurements: Measurement were taken on the outflow pipe on both wells. Well #1 (A0016965) measured 2,140 GPM and Well #2 (A0016966) measured 1614 GPM.

**E. FLOW CALCULATIONS**X Additional Computation Sheets Attached

Measured Method:

Average maximum flow rate for Well #1 using the Thyme Flyte equals 2140 GPM or 4.77 cfs. Average maximum flow rate for Well #2 using the Thyme Flyte equals 1614 GPM or 3.60 cfs. Total average maximum system flow rate equals 3754 GPM or 8.40 cfs.

Water use is limited by permitted amount of 1" per acre or .02 cfs/acre for a total of .44 cfs.

**F. VOLUME CALCULATIONS**

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Headgate Requirement}) = 22 \times 4.5 = 99.0 \text{ AF}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = .44 \times 260 \times 1.9835 = 226.9 \text{ AF}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 99.0 \text{ AF}$$

2. Volume Calculations for Other Uses: N/A

**G. NARRATIVE/REMARKS/COMMENTS**

This water right covers acreage historically farmed since 1969 but was inadvertently omitted from the legal description for rights 57-2271 and 57-2278. There are two PODs for this water right. In approximately May 2012, one of the wells collapsed and was replaced with a new well. According to Rob Whitney, they are supposed to abandon the old well or use it for Stockwater only. Rob Whitney would like to be notified prior to issuing this license to verify compliance. The original well was in T4S, R1W, Sec 26 and the new well is in section T4S, R1W, Sec 25. During the field exam, we notified the owner Lorna Steiner and the manager Mike Van they would need to submit a water right transfer on all their existing rights to reflect the new well legal description. The POD legal description for this water right 57-11711 has been changed to reflect the new location.

The irrigation system for this right is comprised of two wells, connected via underground pipe. The pipe runs from the new well (designated POD Well #1 on the system diagram) to POD Well #2 located at the center of the northeast pivot, then runs southwest to the center of the second pivot, and on to the southwest to the edge of the pivot line where the line turns south along the section line to the creek. Another north-south line splits the two pivots and carries water to the south fields. Back close to Well #1, a north-south line carries water to the 22 acres requested under this water right. Hand lines irrigate all fields except the two pivots. This explanation was diagramed during the field exam by Lorna Steiner and later verified by Mike Van. Mike also indicated there was a third well north of the west pivot, somewhere around T4S, R1W, Sec 26, NESW1/4. Mike indicated this well was no longer used but was connected into the system in the past. We did not verify a location on this well. We did not observe any power polls or transformers in the area where Mike said the well was located.

Measurements were taken on both wells using the Thyme Flyte. Well #1 was turned on and the system opened to measure maximum flow at 2,140 GPM. Then Well #1 was shut down and Well #2 was turned on, measuring 1,614 GPM. The total system capacity equals 8.37 cfs which is consistent with Mike Van's expectations. The combined diversion rates of overlapping water right 57-2271 (4.5 cfs) and water right 57-2278 (2.8 cfs) and this water right 57-11711 (.44 cfs) equal a total diversion rate of 7.74 which is less than the system capacity. No combined condition is required on this water right.

Have conditions of permit approval been met? X Yes \_\_\_\_\_ No

**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       | 0.440 CFS             | 99.00 AF             |
|                       | <u>Totals:</u>       | 0.440 CFS             | 99.00 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

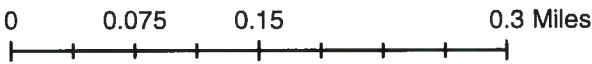
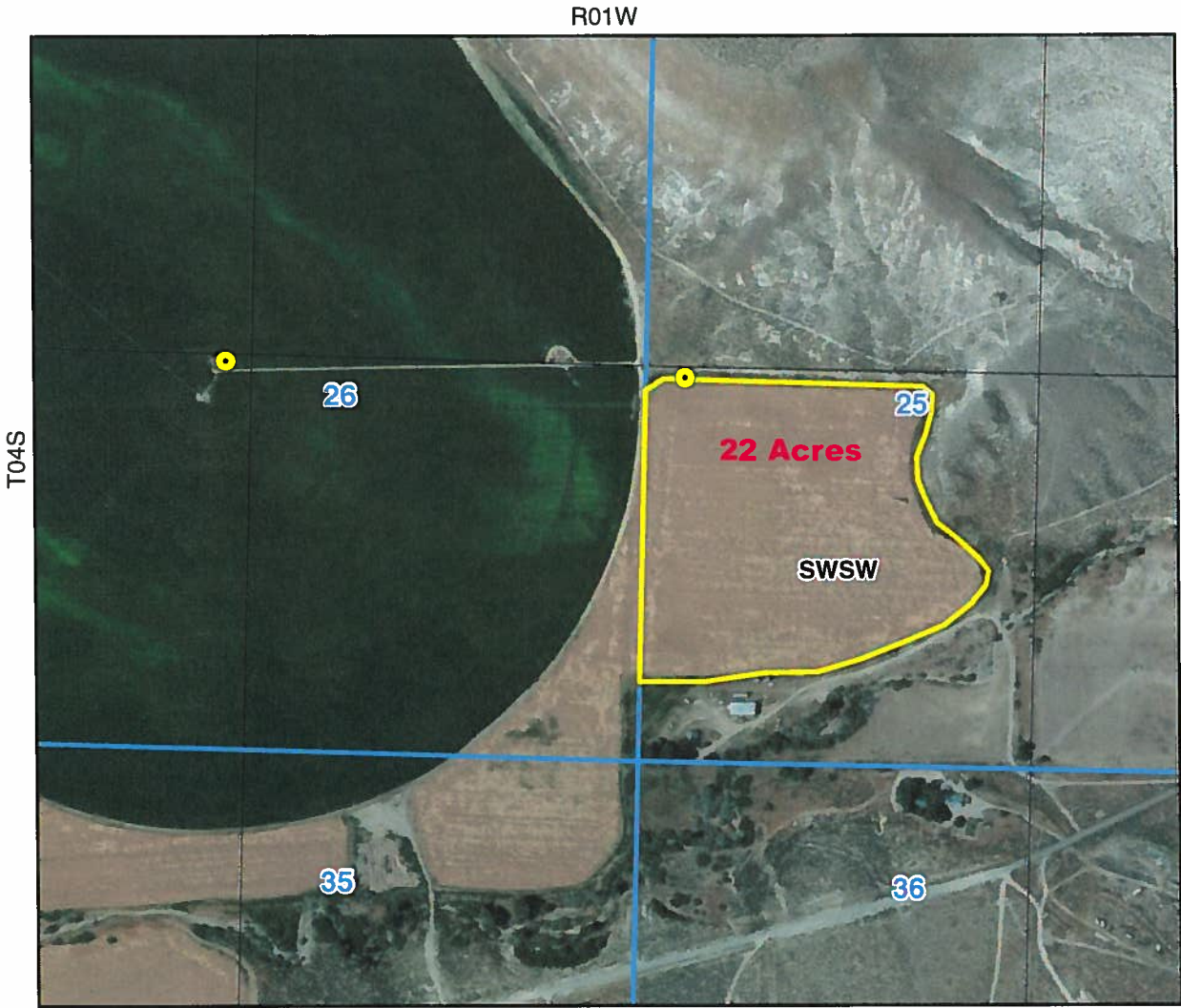
**I. AUTHENTICATION**

Field Examiner's Name Glenn L. Anderson Date 17 July 2012

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

State of Idaho  
Department of Water Resources  
**Attachment To Water Right License**  
57-11711

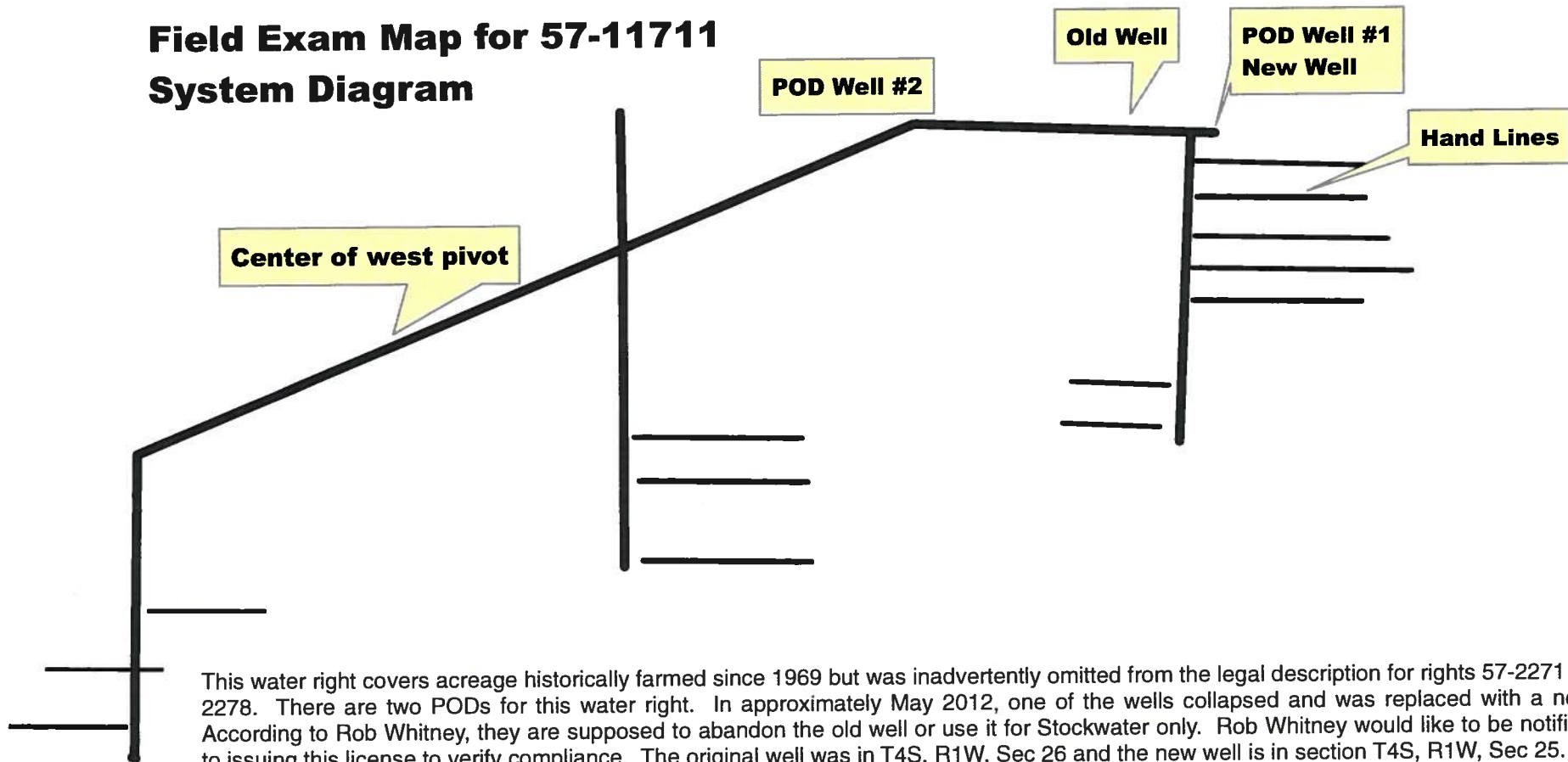
This map depicts the IRRIGATION place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.



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



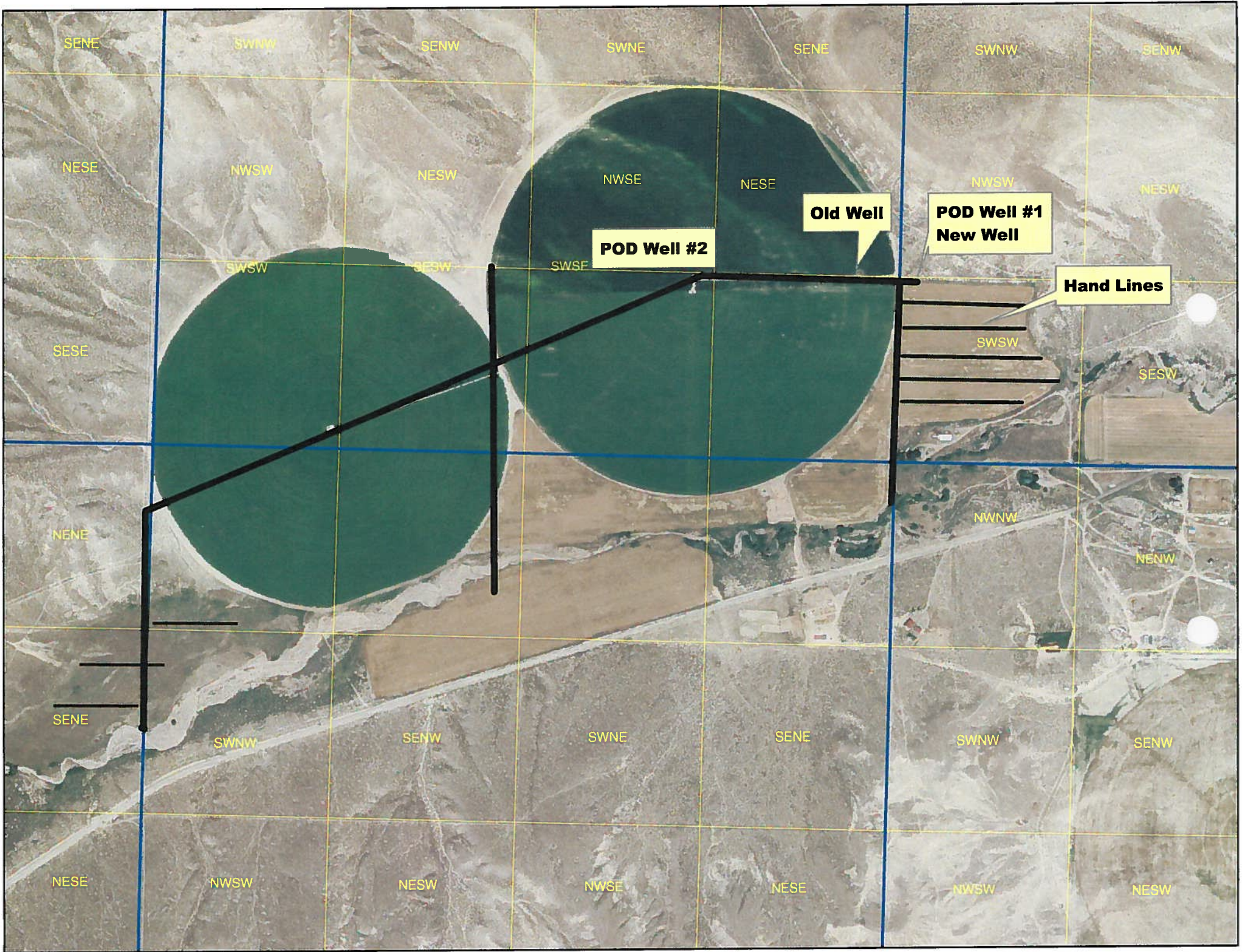
## Field Exam Map for 57-11711 System Diagram



This water right covers acreage historically farmed since 1969 but was inadvertently omitted from the legal description for rights 57-2271 and 57-2278. There are two PODs for this water right. In approximately May 2012, one of the wells collapsed and was replaced with a new well. According to Rob Whitney, they are supposed to abandon the old well or use it for Stockwater only. Rob Whitney would like to be notified prior to issuing this license to verify compliance. The original well was in T4S, R1W, Sec 26 and the new well is in section T4S, R1W, Sec 25. During the field exam, we notified the owner Lorna Steiner and the manager Mike Van they would need to submit a water right transfer on all their existing rights to reflect the new well legal description. The POD legal description for this water right 57-11711 has been changed to reflect the new location.

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**POD Well #2**

**Old Well**

**POD Well #1  
New Well**

**Hand Lines**

MODE SELECT  
INPUT

A0016766

#2

OUTER DIAMETER  
12.3100 IN

WALL THICKNESS  
0.1210 IN

SENSOR MOUNTING  
U

TYPE OF SENSOR  
SMALL

SPACING  
9.357 IN U

MODE SELECT  
T0 CHECK

0443.2 MMSEC  
100.36 % T0

11:26+ 1.565E 3GPM 00R  
+00000 \*10 G 00R  
-00000 \*10 G 00R

11:27+ 1.610E 3GPM 00R  
+00159 \*10 G 00R  
-00000 \*10 G 00R

11:28+ 1.642E 3GPM 00R  
+00321 \*10 G 00R  
-00000 \*10 G 00R

11:29+ 1.632E 3GPM 00R  
+00483 \*10 G 00R  
-00000 \*10 G 00R

11:30+ 1.605E 3GPM 00R  
+00644 \*10 G 00R  
-00000 \*10 G 00R

11:31+ 1.622E 3GPM 00R  
+00804 \*10 G 00R  
-00000 \*10 G 00R

11:32+ 1.609E 3GPM 00R  
+00968 \*10 G 00R  
-00000 \*10 G 00R

11:33+ 1.615E 3GPM 00R  
+01128 \*10 G 00R  
-00000 \*10 G 00R

11:34+ 1.582E 3GPM 00R  
+01289 \*10 G 00R  
-00000 \*10 G 00R

11:35+ 1.622E 3GPM 00R  
+01451 \*10 G 00R  
-00000 \*10 G 00R

11:36+ 1.592E 3GPM 00R  
+01614 \*10 G 00R  
-00000 \*10 G 00R

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Glen Gardiner

MODE SELECT  
INPUT

A0016766

#2

OUTER DIAMETER  
12.3100 IN

WALL THICKNESS  
0.1210 IN

SENSOR MOUNTING  
U

TYPE OF SENSOR  
SMALL

SPACING  
9.357 IN U

MODE SELECT  
T0 CHECK

0443.2 MMSEC  
100.36 % T0

11:26+ 1.565E 3GPM 00R  
+00000 \*10 G 00R  
-00000 \*10 G 00R

11:27+ 1.610E 3GPM 00R  
+00159 \*10 G 00R  
-00000 \*10 G 00R

11:28+ 1.642E 3GPM 00R  
+00321 \*10 G 00R  
-00000 \*10 G 00R

11:29+ 1.632E 3GPM 00R  
+00483 \*10 G 00R  
-00000 \*10 G 00R

11:30+ 1.605E 3GPM 00R  
+00644 \*10 G 00R  
-00000 \*10 G 00R

11:31+ 1.622E 3GPM 00R  
+00804 \*10 G 00R  
-00000 \*10 G 00R

11:32+ 1.609E 3GPM 00R  
+00968 \*10 G 00R  
-00000 \*10 G 00R

11:33+ 1.615E 3GPM 00R  
+01128 \*10 G 00R  
-00000 \*10 G 00R

11:34+ 1.582E 3GPM 00R  
+01289 \*10 G 00R  
-00000 \*10 G 00R

11:35+ 1.622E 3GPM 00R  
+01451 \*10 G 00R  
-00000 \*10 G 00R

11:36+ 1.592E 3GPM 00R  
+01614 \*10 G 00R  
-00000 \*10 G 00R

1614 GPM

57-4711  
Tag A0016965

MODE SELECT  
INPUT  
OUTER DIAMETER  
2.140 IN  
PIPE MATERIAL  
CS,SS  
WALL THICKNESS  
0.2438 IN  
INNER LINING  
NO LING.  
KIND OF FLUID  
WATER  
SENSOR MOUNTING  
U  
TYPE OF SENSOR  
SMALL  
ZERO MODE  
CLEAR

07-12 10:3900 \*R  
+002.70 % AI2

|        |              |     |
|--------|--------------|-----|
| 10:45+ | 2.157E 3GPM  | 00R |
|        | +00000 *10 G | 00H |
|        | -00000 *10 G | 00H |
| 10:46+ | 2.142E 3GPM  | 00R |
|        | +00212 *10 G | 00R |
|        | -00000 *10 G | 00R |
| 10:47+ | 2.099E 3GPM  | 00H |
|        | +00424 *10 G | 00H |
|        | -00000 *10 G | 00H |
| 10:48+ | 2.126E 3GPM  | 00R |
|        | +00637 *10 G | 00R |
|        | -00000 *10 G | 00R |
| 10:49+ | 2.093E 3GPM  | 00R |
|        | +00849 *10 G | 00R |
|        | -00000 *10 G | 00R |
| 10:50+ | 2.062E 3GPM  | 00R |
|        | +01064 *10 G | 00H |
|        | -00000 *10 G | 00H |
| 10:51+ | 2.106E 3GPM  | 00R |
|        | +01275 *10 G | 00R |
|        | -00000 *10 G | 00R |
| 10:52+ | 2.274E 3GPM  | 00R |
|        | +01489 *10 G | 00R |
|        | -00000 *10 G | 00R |
| 10:53+ | 2.200E 3GPM  | 00R |
|        | +01707 *10 G | 00R |
|        | -00000 *10 G | 00R |
| 10:54+ | 2.234E 3GPM  | 00R |
|        | +01923 *10 G | 00R |
|        | -00000 *10 G | 00R |
| 10:55+ | 2.045E 3GPM  | 00H |
|        | +02140 *10 G | 00R |
|        | -00000 *10 G | 00R |

Field Exam  
12 July 2012  
Glen Gardiner

57-4711  
Tag A0016965

MODE SELECT  
INPUT  
OUTER DIAMETER  
2.140 IN  
PIPE MATERIAL  
CS,SS  
WALL THICKNESS  
0.2438 IN  
INNER LINING  
NO LING.  
KIND OF FLUID  
WATER  
SENSOR MOUNTING  
U  
TYPE OF SENSOR  
SMALL  
ZERO MODE  
CLEAR

07-12 10:3900 \*R  
+002.70 % AI2

|        |              |     |
|--------|--------------|-----|
| 10:45+ | 2.157E 3GPM  | 00R |
|        | +00000 *10 G | 00H |
|        | -00000 *10 G | 00H |
| 10:46+ | 2.142E 3GPM  | 00R |
|        | +00212 *10 G | 00R |
|        | -00000 *10 G | 00R |
| 10:47+ | 2.099E 3GPM  | 00H |
|        | +00424 *10 G | 00H |
|        | -00000 *10 G | 00H |
| 10:48+ | 2.126E 3GPM  | 00R |
|        | +00637 *10 G | 00R |
|        | -00000 *10 G | 00R |
| 10:49+ | 2.093E 3GPM  | 00R |
|        | +00849 *10 G | 00R |
|        | -00000 *10 G | 00R |
| 10:50+ | 2.062E 3GPM  | 00R |
|        | +01064 *10 G | 00H |
|        | -00000 *10 G | 00H |
| 10:51+ | 2.106E 3GPM  | 00R |
|        | +01275 *10 G | 00R |
|        | -00000 *10 G | 00R |
| 10:52+ | 2.274E 3GPM  | 00R |
|        | +01489 *10 G | 00R |
|        | -00000 *10 G | 00R |
| 10:53+ | 2.200E 3GPM  | 00R |
|        | +01707 *10 G | 00R |
|        | -00000 *10 G | 00R |
| 10:54+ | 2.234E 3GPM  | 00R |
|        | +01923 *10 G | 00R |
|        | -00000 *10 G | 00R |
| 10:55+ | 2.045E 3GPM  | 00H |
|        | +02140 *10 G | 00R |
|        | -00000 *10 G | 00R |

2140 GPM

PHOTOGRAPHER AND DATE OF PHOTOS Glen Gardiner July 12, 2012  
FILE NUMBER 57-11711



These photos show the new well. The well ID was placed at the top of the left railroad tie in the left picture. The right picture shows the well with the discharge pipe. The flow measurement was taken to the left of the 45 degree just above the ground.



This photo shows the field looking east to south to west. Water Right 57-11711 is for the wheat field. The green pivot is covered under Water Rights 57-2271 and 57-2278. The system ties together supplying water to all three Water Rights.



Well #2 is located at the center of the east pivot. The well ID was attached to the railroad tie just below the township/range sign.



Well #2 was measured at the discharge pipe out of the well. The system T's with the right leg traveling east underground to Well #1. The left leg travels southwesterly underground to this pivot and on towards the western pivot.