

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 15-7237

Exam Date: 05/04/2015

1. Current Owner: MALAD FARM LLC
16904 JUANITA DR NE STE 269
KENMORE WA 98028
2. Accompanied by: LuAnn Thomas
Relationship to Permit Holder: Original Permit Holder's Wife

3. SOURCE TRIBUTARY
GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: None. Portions of this right's POU overlap with Samaria Irrigation Company's POU, but license holder has no shares.
2. Other water rights with the same point of diversion: 15-7408

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

GROUND WATER SW1/4SE1/4 Sec. 28, Twp 14S, Rge 35E, B.M.
ONEIDA County

Method of Determination: GPS and ArcMap

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	
14S 35E 27											12.0						12.0
14S 35E 33													9.7			16.0	25.7
14S 35E 34									30.0	32.0	30.0						92.0

Total Acres: 129.7

Method of Determination:

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. Well/Diversion Information

400 HP motor with VFD at site.

D. FLOW MEASUREMENTS1. Measurement Equipment

Fuji Portaflow ultrasonic meter.

2. Measurements

The measurements were taken on two pipes. They were each totalized over 10 minutes and recorded. The highest observed readings during the 10-minute measurement were used to calculate rate.

E. FLOW CALCULATIONS

☒ Additional Computation Sheets Attached

Highest rates observed:

Pipe one: 2724 gpm

Pipe Two: 2550 gpm

System total: $2724 \text{ gpm} + 2550 \text{ gpm} = 5274 \text{ gpm/system}$

System total cfs: $5274 \text{ gpm/system} / 448.83 \text{ gpm/cfs} = 11.75 \text{ cfs}$

Other water rights in system with earlier priority date: 15-7408, 6.14 cfs

Total remaining in system: 5.61 cfs

$129.7 \text{ acres} * 0.02 \text{ cfs/acre} = 2.60 \text{ cfs}$

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 129.7 \text{ acres} \times 3.5 \text{ acre-feet/acre} = 454 \text{ acre feet}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 2.60 \times 214 \times 1.9835 = 1103.6$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 454 \text{ acre feet}$$

2. Volume Calculations for Other Uses: N/A

G. NARRATIVE/REMARKS/COMMENTS

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>
IRRIGATION	04/01 to 10/31	2.600 CFS	454.00 AF
<u>Totals:</u>		2.600 CFS	454.00 AF

2. Recommended Amendments

☒ Change P.D. as reflected above ☐ Add P.D. as reflected above ☐ None

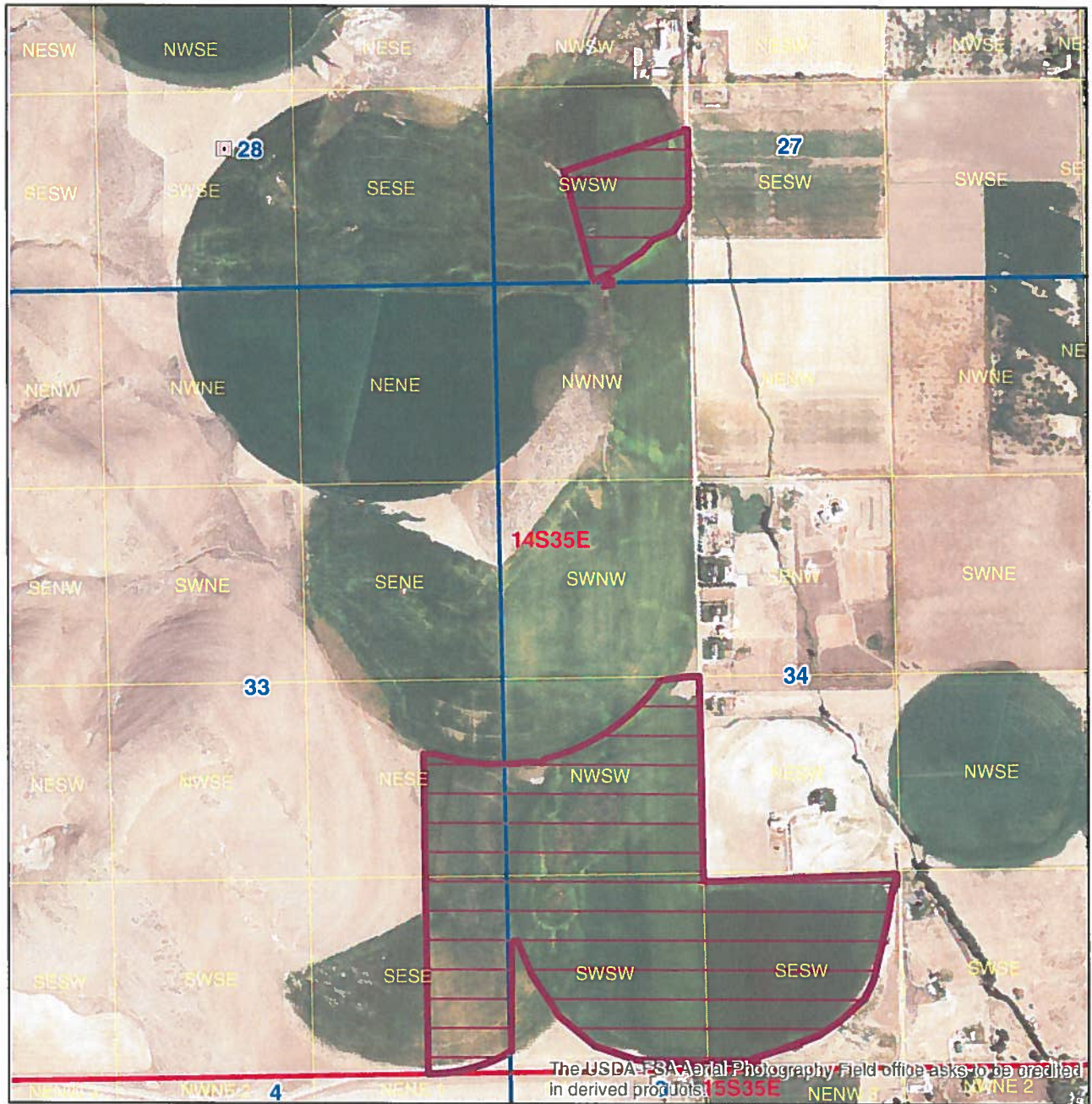
☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

I. AUTHENTICATION

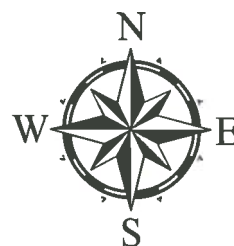
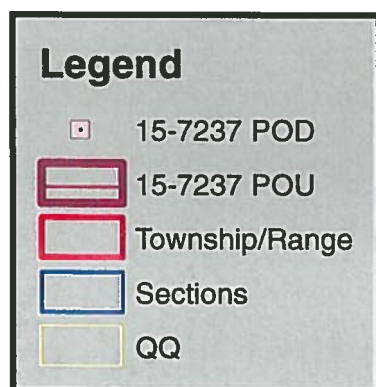
Field Examiner's Name Cooper Fritz Date 5/18/2015

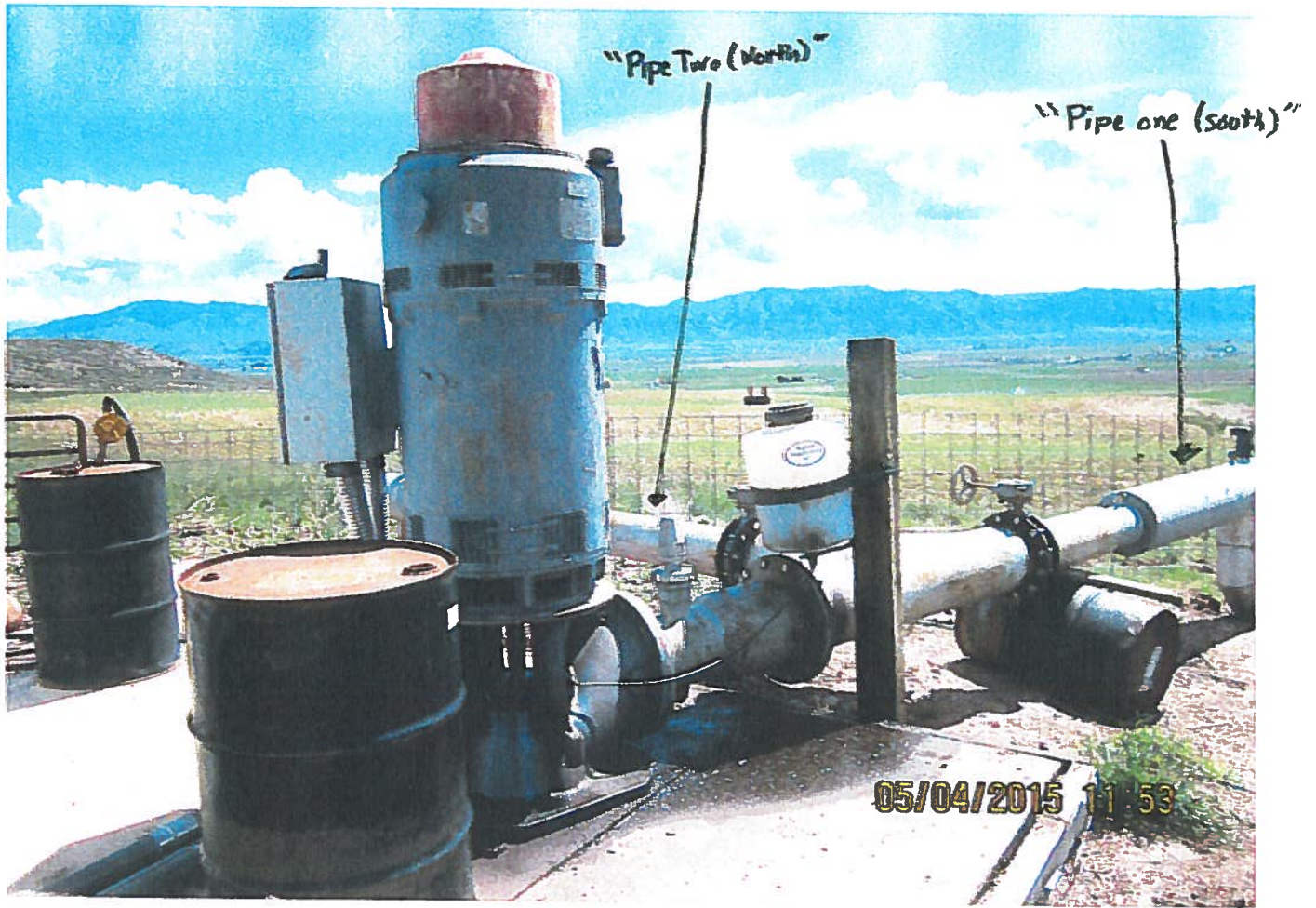
Reviewer _____ Date _____

15-7237 POD and POU



2013 Imagery





POD for 15-7237 & 15-7405

Measurement Calculations

for well in 14S35E 28 SW 1E (POD for 15-7408 & 15-7237)

Pipe one: 11:42:04 - 27214 gallons
11:31:38 - 290 gallons
10.567 min - 26924 gallons

$$(10 \text{ minutes} / 10.567 \text{ minutes}) \times 26924 \text{ gpm} = 25479.3 \text{ gpm} / 10 = 2547.93$$

- or -

$$26924 \text{ gpm} / 10.567 \text{ minutes} = 2547.93 \text{ gpm}$$

Highest observed rate: 2724 gpm

Pipe two: 12:36:12 - 24431 gallons
12:26:06 - 00080 gallons

10.10 minutes - 24381 gallons

$$24381 / 10.10 \text{ minutes} = 2413.96 \text{ gpm average}$$

Highest observed rate: 2550 gallons per minute

$$2724 \text{ gpm} + 2550 \text{ gpm} = 5274 \text{ gpm/system} / 448.83 \text{ acre-feet} =$$
$$11.75 \text{ cfs/system}$$

15-05-04 11:31:36
 --2.537E+3 gal/m
 -TOTAL 293 gal
 NORMAL

Pipe one (south)

15-05-04 11:47:04
 +2.631E+3 gal/m
 -TOTAL 2774 gal
 NORMAL

14S 35E 28 SWSE

15-05-04 11:47:04
 +2.631E+3 gal/m
 -TOTAL 2774 gal
 NORMAL

15-05-04 11:47:04

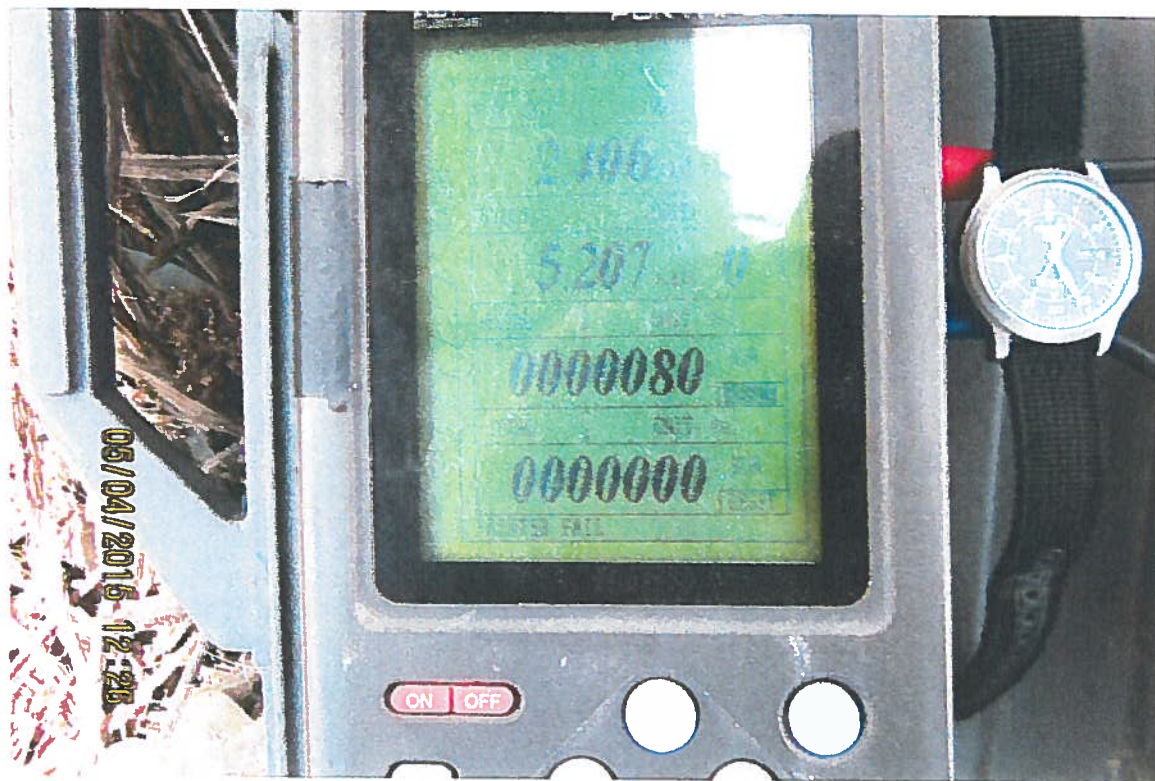
15-05-04 11:47:04
 +2.631E+3 gal/m
 -TOTAL 2774 gal
 NORMAL

Pipe 2 - "Abnormal"
 Printer for loc

14S 35E 28 SWSE

Pipe 2 (North)

Start: 12:26:06



146 35E 28 SW SE
Pipe 2 (north)
End: 12:36:12

