

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 15-7192

Exam Date: 5/4/2015

1. Current Owner: MALAD FARM LLC
16904 JUANITA DR NE STE 269
KENMORE WA 98028

*SPLIT AT LICENSING INTO
15-7192 AND 15-7408*

2. Accompanied by: LuAnn Thomas
Relationship to Permit Holder: Wife of original applicant

3. SOURCETRIBUTARY

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: None. The POU is within the boundary of Samaria Irrigation Company, but the water right holders do not have shares.
2. Other water rights with the same point of diversion: None

C. DIVERSION AND DELIVERY SYSTEM1. LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER SW1/4NE1/4 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							26.0				13.0						40.0
14S	35E	28			39.0	24.0				9.8	8.4				14.0	37.0			132.2

Total Acres: 171.2

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 and Point of Diversion Information**

One 150 HP pump (serial number F05-AAGS-MAZ), one 60 HP booster, VFD at site.

D. FLOW MEASUREMENTS

Measured with a Fuji Portaflow ultrasonic meter. The printer was not working, so a watch was used as a timer. Both pipes were measured separately. Pipe two was measured downstream of booster.

2. Measurements: Please see attached measurement page. Note that the rate authorized is based on the highest one-second totalized reading seen during the 10-minute measurement.

E. FLOW CALCULATIONS

☒ Additional Computation Sheets Attached

Highest observed rate from pipe one: 972.9 gpm
Highest observed rate from pipe two: 535.2 gpm

$972.9 \text{ gpm} + 535.2 \text{ gpm} = 1508.1 \text{ gpm/system}$

$1508.1 \text{ gpm} / 448.83 \text{ gpm/cfs} = 3.36 \text{ cfs}$

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 171.2 \text{ acres} \times 3.5 \text{ af/acre} = 599.2$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 3.36 \times 214 \times 1.9835 = 1426.22$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 599.2$$

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	3.360 CFS	599.20 AF
<u>Totals:</u>		3.360 CFS	599.20 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

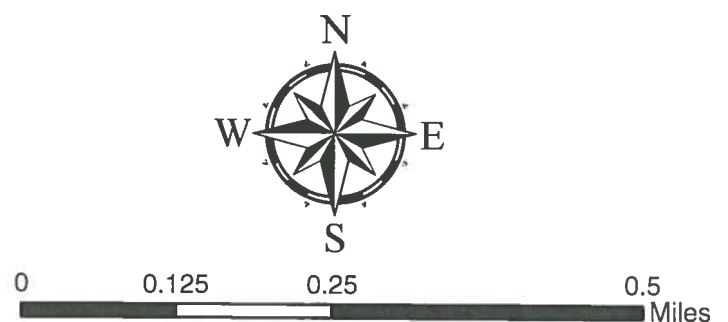
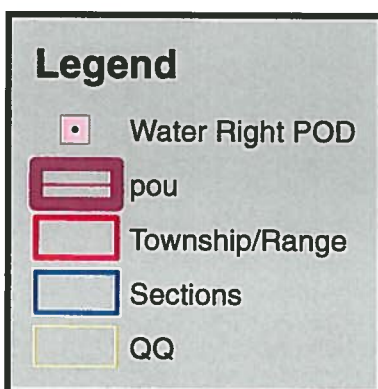
Field Examiner's Name Cooper Fritz Date 5/18/2015

Reviewer _____ Date _____

15-7192 POD and POU



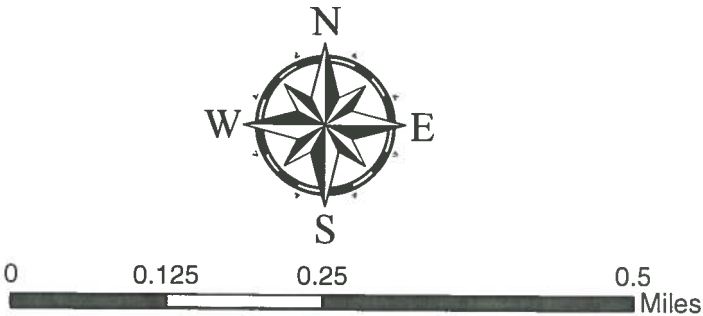
2013 Imagery



15-7192 POD, Mainline, and POU Locations



2013 Imagery



North Well (14S 35E 28 SWNE)

Pipe One: 13:25:10 - 9911 gallons
13:14:49 - 32 gallons

10:21^{minutes} - 9879 gallons

9879 gallons / 10.35 minutes = 954.49 gpm / avg.

Highest observed rate: 972.9 gpm

Pipe Two: 13:52:02 - 5502 gallons
13:51:33 - 17 gallons

10:31 - 5485 gallons

5485 gallons / 10.5167 minutes = 521.55 gpm / avg

Highest observed rate: 535.2 gpm

System total: 1508.1 gpm / 448.83 gpm/ft³ = 3.360 cfs

Pipe Two

"North well"



Pipe one



14 S 35E 28 SWNE

Pipe One

start



14S 35E 28 SWNE

Pipe One
End



14S 35E 28 SWNE

Pipe Two
Start



14S 35E 28 SWNE

Pipe Two
End