

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 15-7142

Exam Date: 7-3-2012

1. Current Owner: HOWELL FAMILY TRUST
10875 S 300 E
MALAD CITY ID 83252
(208)766-2580
2. Accompanied by: Norman Howell
Phone No: Same as above
Address: Same as above
Relationship to Permit Holder: Permit Holder

3. SOURCE**TRIBUTARY**

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 15-7134
2. Other water rights with the same point of diversion: 15-7134

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

GROUND WATER

SW1/4NW1/4

Sec. 15, Twp 16S, Rge 36E, B.M.

ONEIDA County

Method of Determination: Map and GPS

2.

PLACE OF USE: IRRIGATION

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	<u>NE</u>	<u>NW</u>	<u>SW</u>	<u>SE</u>	
16S	36E	15					27.2	40.0	40.0	35.1	36.1	40.0							218.4
16S	36E	16	22.5			27.0									15.6				65.1

Total Acres: 283.5

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.

<u>Well or Diversion</u> <u>ID No.*</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Pump Serial No. or Discharge</u> <u>Size</u>
A0018270	GE	150			

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

D. FLOW MEASUREMENTS

1.

<u>Measurement</u> <u>Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
Flowmeter	FSC	Fuji	S10-A1-00Y	A0L55371		3-30-2012

2. Measurements: A ten minute flow test was performed. The average flow rate was 2010.45 GPM. The maximum instantaneous flow rate was 2026.49 gpm or 4.52 cfs.

E. FLOW CALCULATIONS☒ Additional Computation Sheets Attached

Measured Method:

Measured Q = 4.52 cfs (maximum flow rate) was 0.01 cfs above permit, so both permits will receive full amounts.

This water right is good for 2.00 cfs, 551.25 AF and 157.5 acres.

Water right 15-7134 is good for 2.51 cfs, 441 AF and 126 acres.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 157.5 \times 3.5 = 551.3 \text{ AF}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 1.97 \times 214 \times 1.9835 = 836.2$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 551.3$$

2. Volume Calculations for Other Uses:

G. NARRATIVE/REMARKS/COMMENTS

The field exam for this permit was carried out on July 3, 2012. Both pivots were running at the time of the exam. The information plate on the motor indicates 150 HP, but Mr. Howell believes that the pump is a 250 HP General Electric turbine pump. A ten minute flow test was done, which yielded an average flow of 2010.45 gpm or 4.48 cfs. The maximum instantaneous flow rate was 2026.49, or 4.52 cfs. This water right shares the same place of use and point of diversion with water right 15-7134. The places of use for both water rights have been changed to reflect the combined places of use. Use of this right with 15-7134 is limited to the irrigation of a combined total of 283.5 acres in a single irrigation season. The season of use for water right 15-7142 will be changed to the current standard of 4-01 to 10-31.

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	2.00 CFS	551.3 AF
<u>Totals:</u>		2.00 CFS	551.3 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

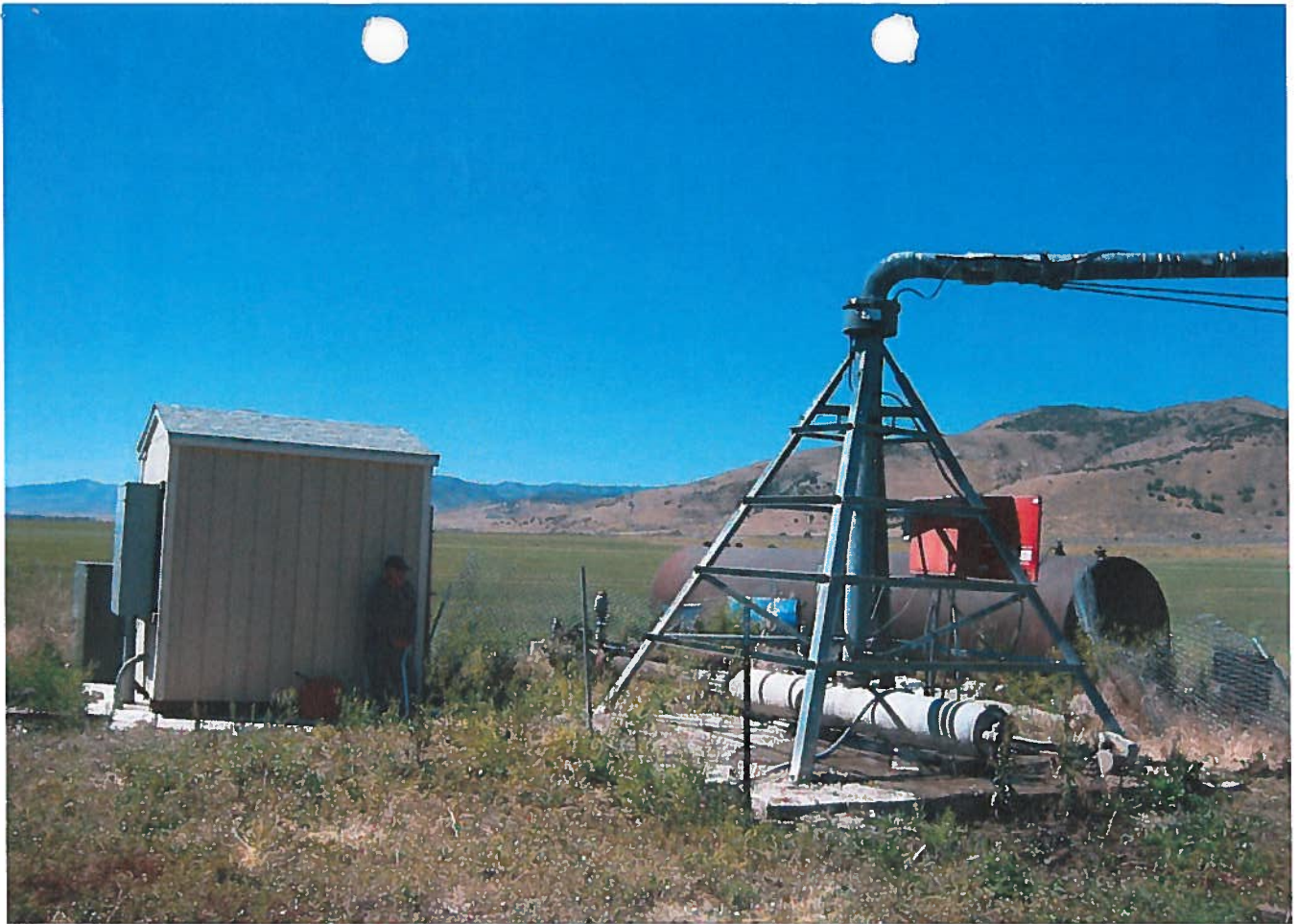
I. AUTHENTICATION

Field Examiner's Name James Bitzenburg

Date 7-3-2012

Reviewer _____ Date _____



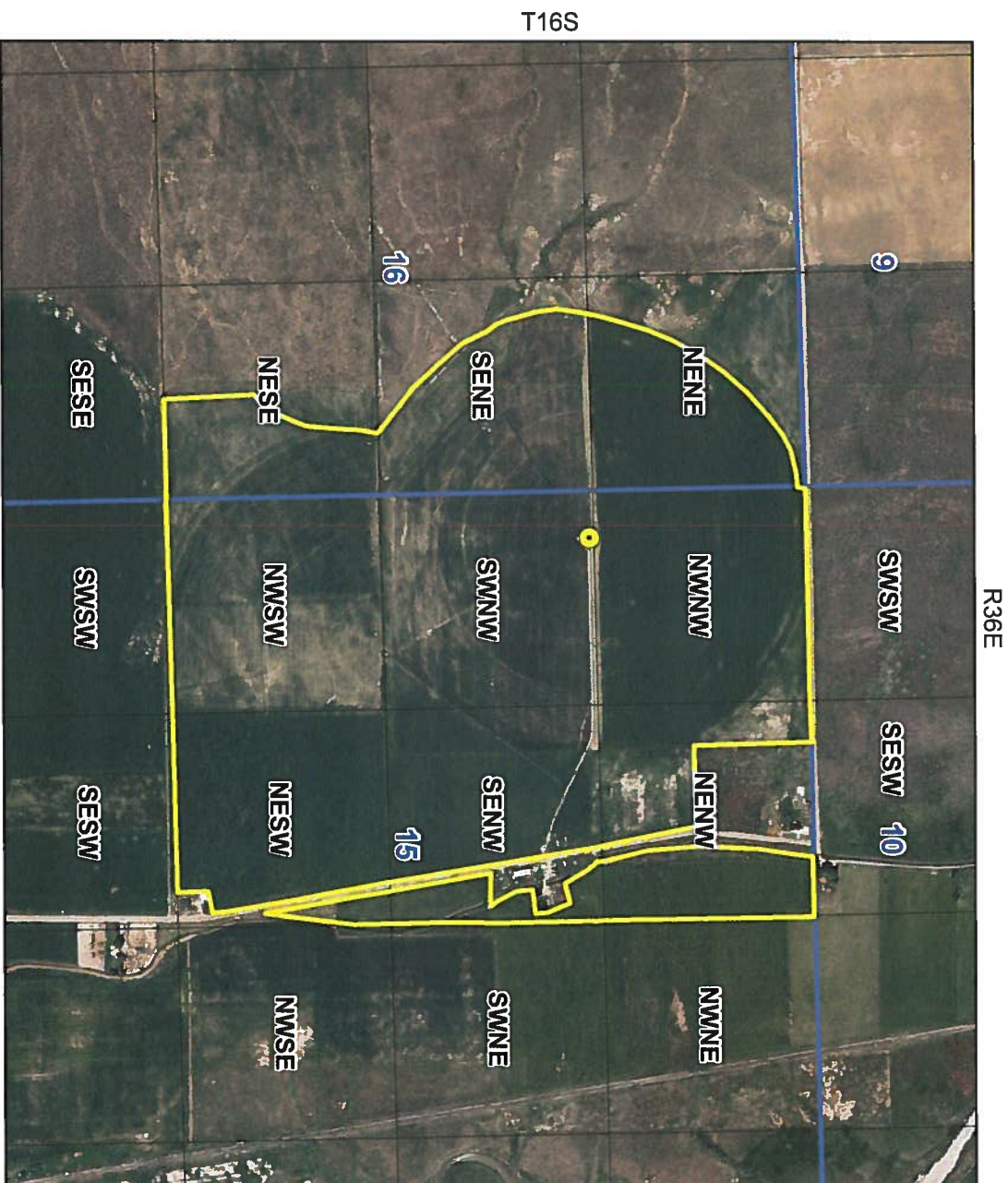




- Point of Diversion
- Place of Use
- State Outline
- Townships
- PLS Sections
- Quarter Quarters



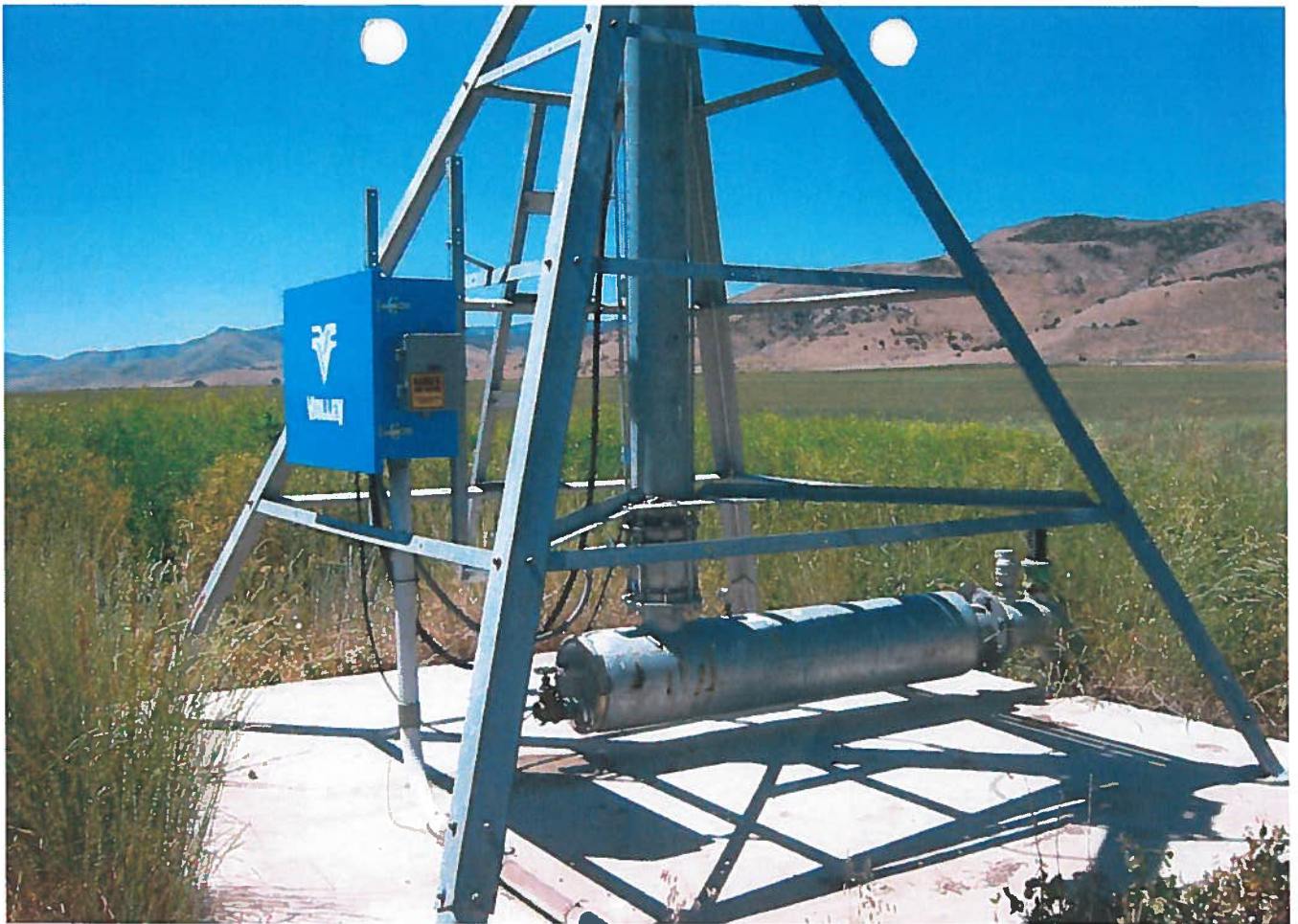
Prepared by Bizenburg, James
On July 18, 2012
2009 Aerial Photography



Owner: Howell Family Trust

NOTE: Only one owner is listed. There may or may not be more than this in the IDWR database.







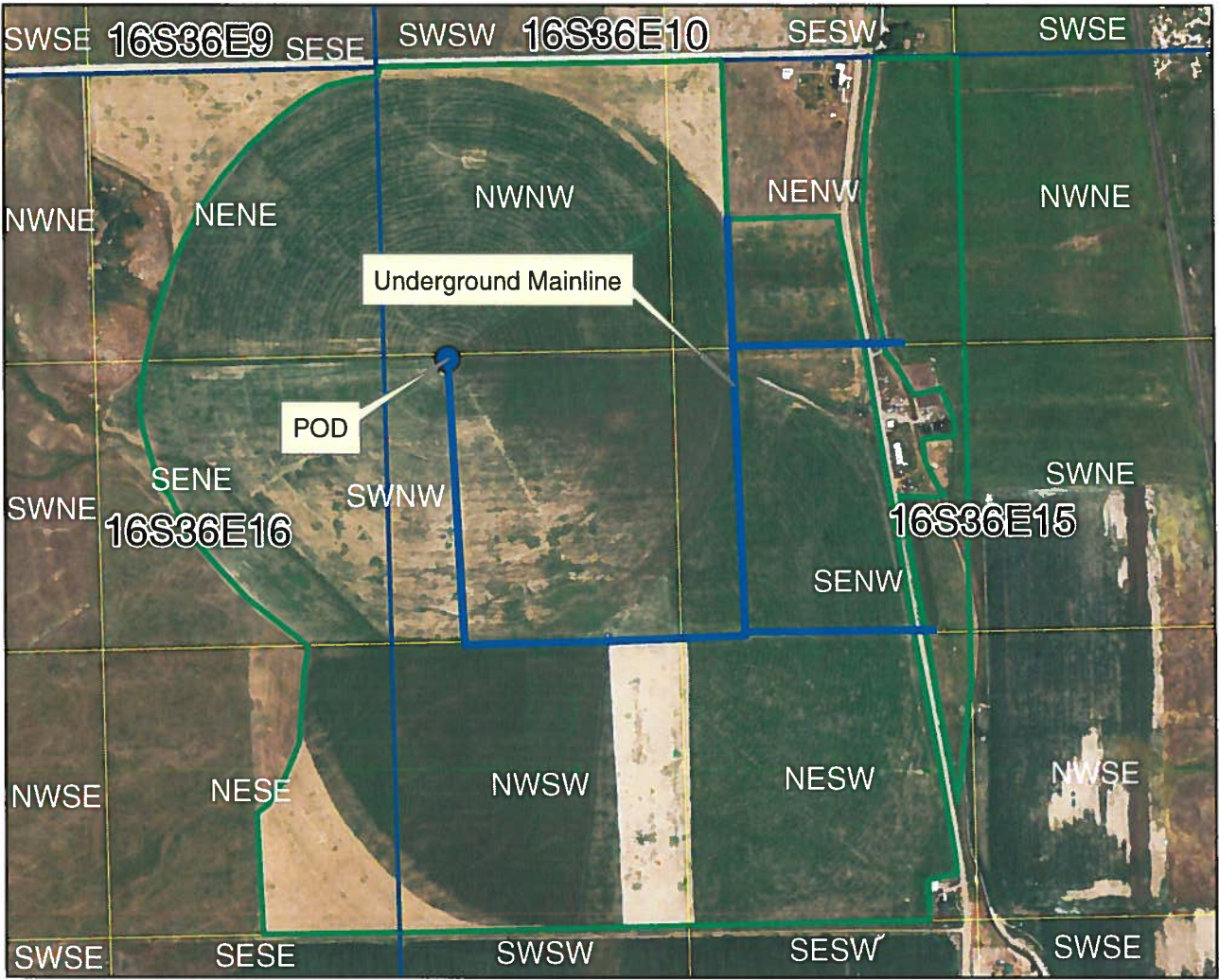
4 'VELOCITY 'FLOW RAT'+TOTALIZER

	ft/s	gal/min	gal
7/3/2012 10:37	8.516	2005.468	169924.129
7/3/2012 10:38	8.487	1998.625	171930.891
7/3/2012 10:39	8.538	2010.77	173938.341
7/3/2012 10:40	8.531	2009.125	175943.505
7/3/2012 10:41	8.52	2006.465	177953.266
7/3/2012 10:42	8.555	2014.724	179963.841
7/3/2012 10:43	8.548	2013.031	181979.958
7/3/2012 10:44	8.552	2014.026	183996.995
7/3/2012 10:45	8.567	2017.672	186004.025
7/3/2012 10:46	8.562	2016.364	188015.557
7/3/2012 10:47	8.605	2026.493	190028.608

20104.479
2010.4479 gpm

2026.49 gpm - maximum diversion rate - 4,52 cfs.

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Delivery System Map of 15-7134 and 15-7142

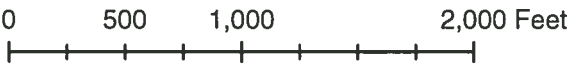


Legend

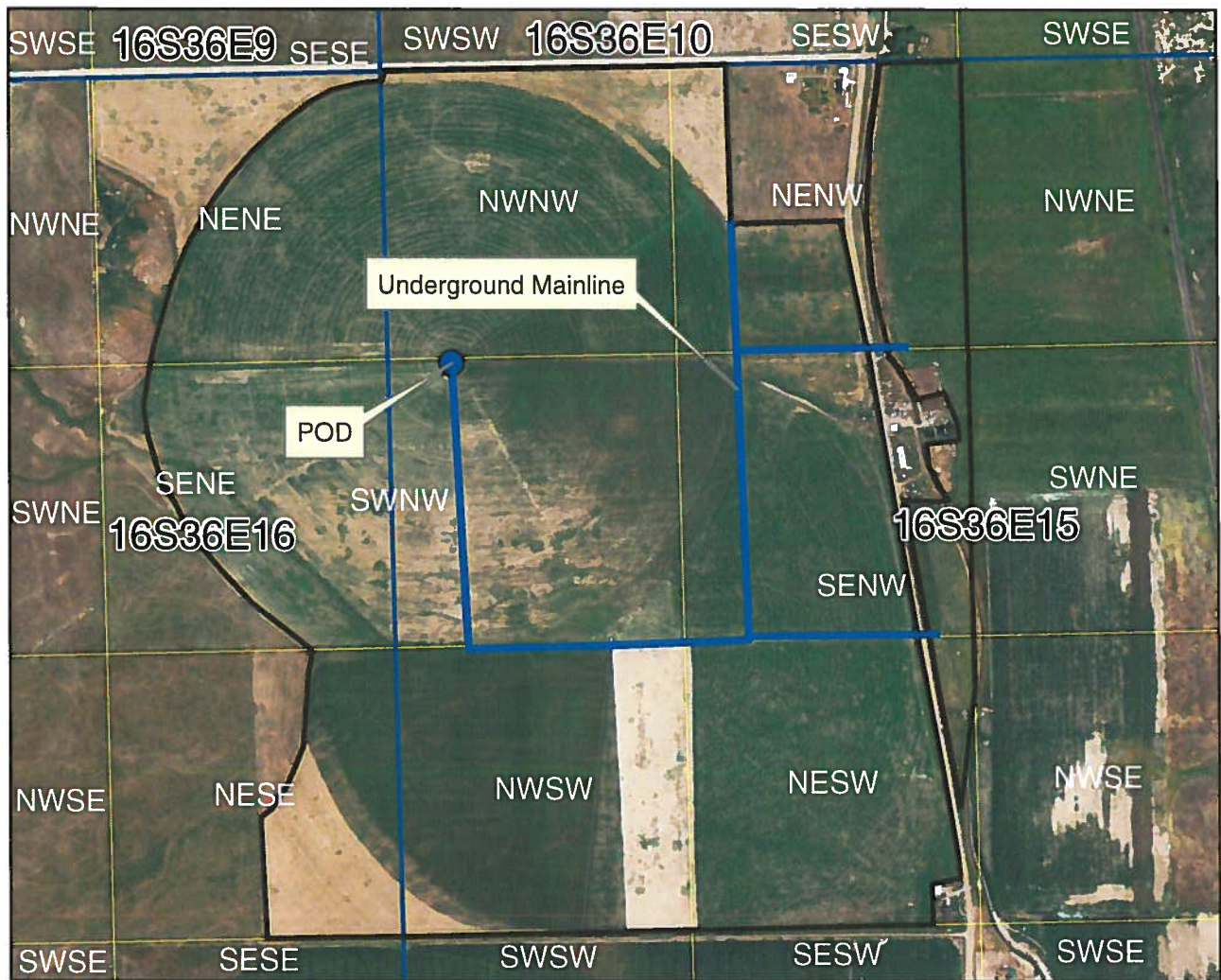
- 15-7134 and 15-7142 POU
- Township/Range
- Sections
- QQ

2011 Aerial Photography

1 inch = 823 feet



Idaho Department of Water Resources



Delivery System Map of 15-7134 and 15-7142



Legend

-  15-7134 and 15-7142 POU
-  Township/Range
-  Sections
-  QQ

2011 Aerial Photography

1 inch = 823 feet

