

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 15-7153

Exam Date: 9/4/2014

1. Current Owner: ELDEN D NIELSEN
930 W SAMARIA LN
MALAD CITY ID 83252
(208)766-4070
2. Accompanied by: Elden Nielsen
Phone No: 208-766-3071
Relationship to Permit Holder: Same

3. SOURCE**TRIBUTARY**

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: Malad Valley Irrigating Company POU and 15-7361.
Malad Valley Irrigation Co. POU covers entire 15-7153 POU. Permit holder has 20 shares of Malad Valley Irrigation Co. water.
Right 15-7361 overlaps on some of the same fields in Section 21 SWSW and Section 28 NWNW. The two rights together are intended to cover 36.7 acres in Section 21 SWSW and 34.7 acres in Section 28 NWNW.
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

SW1/4SW1/4

Sec. 21, Twp 14S, Rge 36E, B.M.

ONEIDA County

Method of Determination: GPS and ArcMap

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>	
14S 36E 20																10.0	10.0
14S 36E 21									24.0	10.0							34.0
14S 36E 28					2.5	16.0	1.0										19.5
14S 36E 29	32.0	3.5	14.0	16.0													65.5

Total Acres: 129

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**

100 HP Pump

D. FLOW MEASUREMENTS

1. **Measurement Equipment**

Fuji Portaflow C

2. **Measurements:**

1190.69 gpm max

For additional information, see spreadsheet of flow rates calculated in 10 second intervals.

E. FLOW/RATE CALCULATIONS

$1190.69 \text{ gpm} / 448.83 \text{ gpm/cfs} = 2.65 \text{ cfs system max}$

Permit authorized 2.58 cfs. System limited to **2.58 cfs**.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 129 \text{ acres} \times 3.5 \text{ AF/acre} = 451.5 \text{ AF}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 2.58 \text{ cfs} \times 214 \text{ days} \times 1.9835 = 1095.13 \text{ AF}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 451.5 \text{ AF}$$

2. Volume Calculations for Other Uses: N/A

G. NARRATIVE/REMARKS/COMMENTS

20 shares of MVI. 160 beef cattle are watered from system. Actually waters ~170 acres.

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	4/15 to 10/15	2.580 CFS	
<u>Totals:</u>		2.580 CFS	

2. Recommended Amendments

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

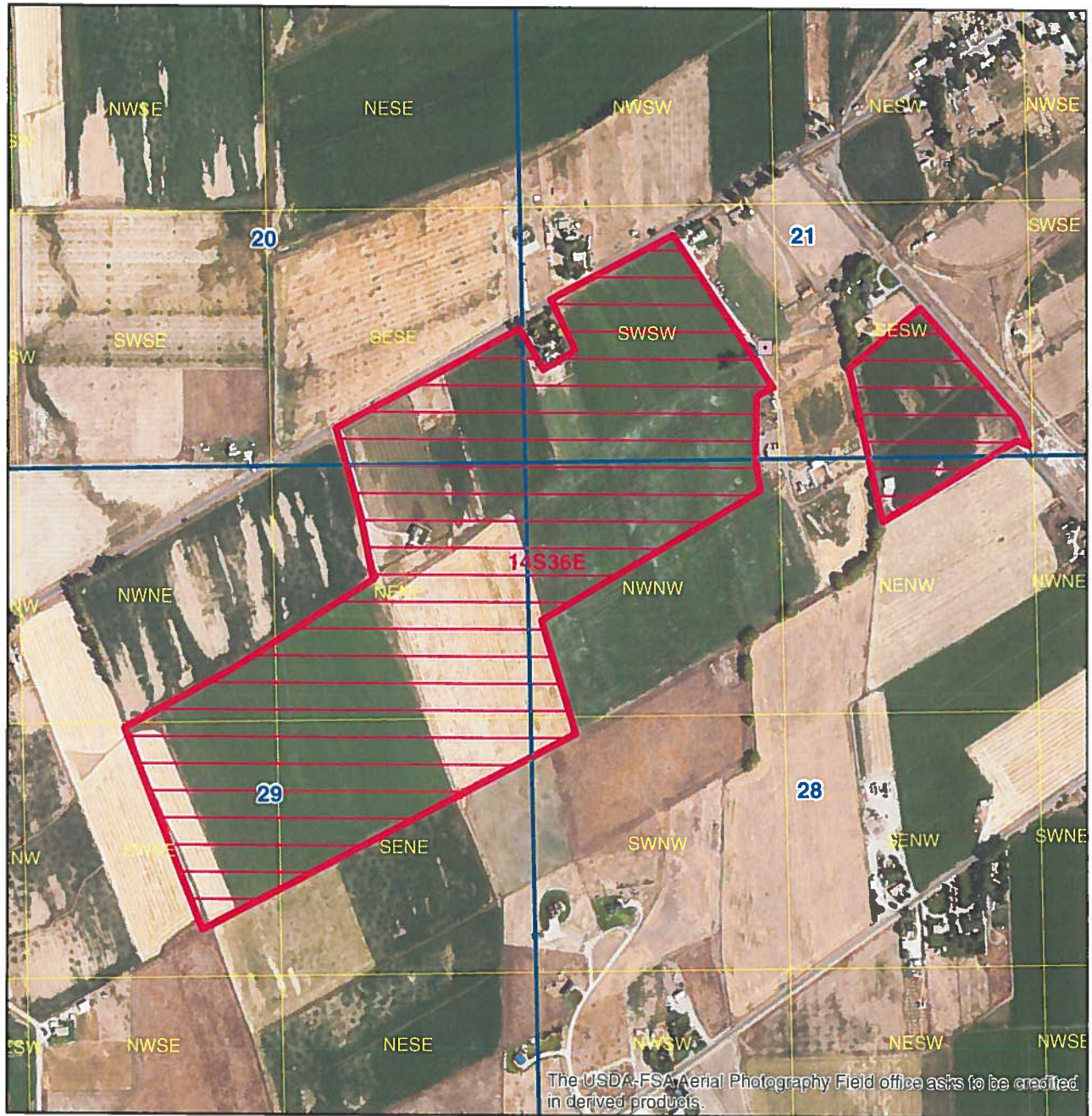
☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

I. AUTHENTICATION

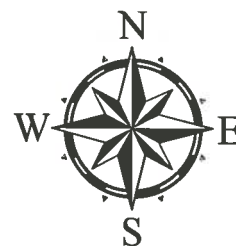
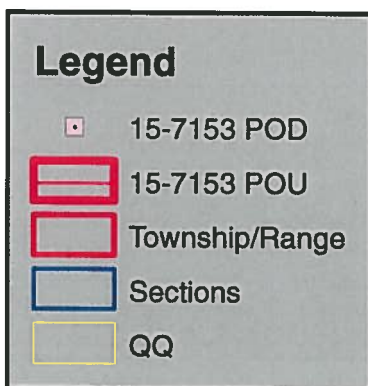
Field Examiner's Name Cooper Fritz Date 2/20/2015

Reviewer _____ Date _____

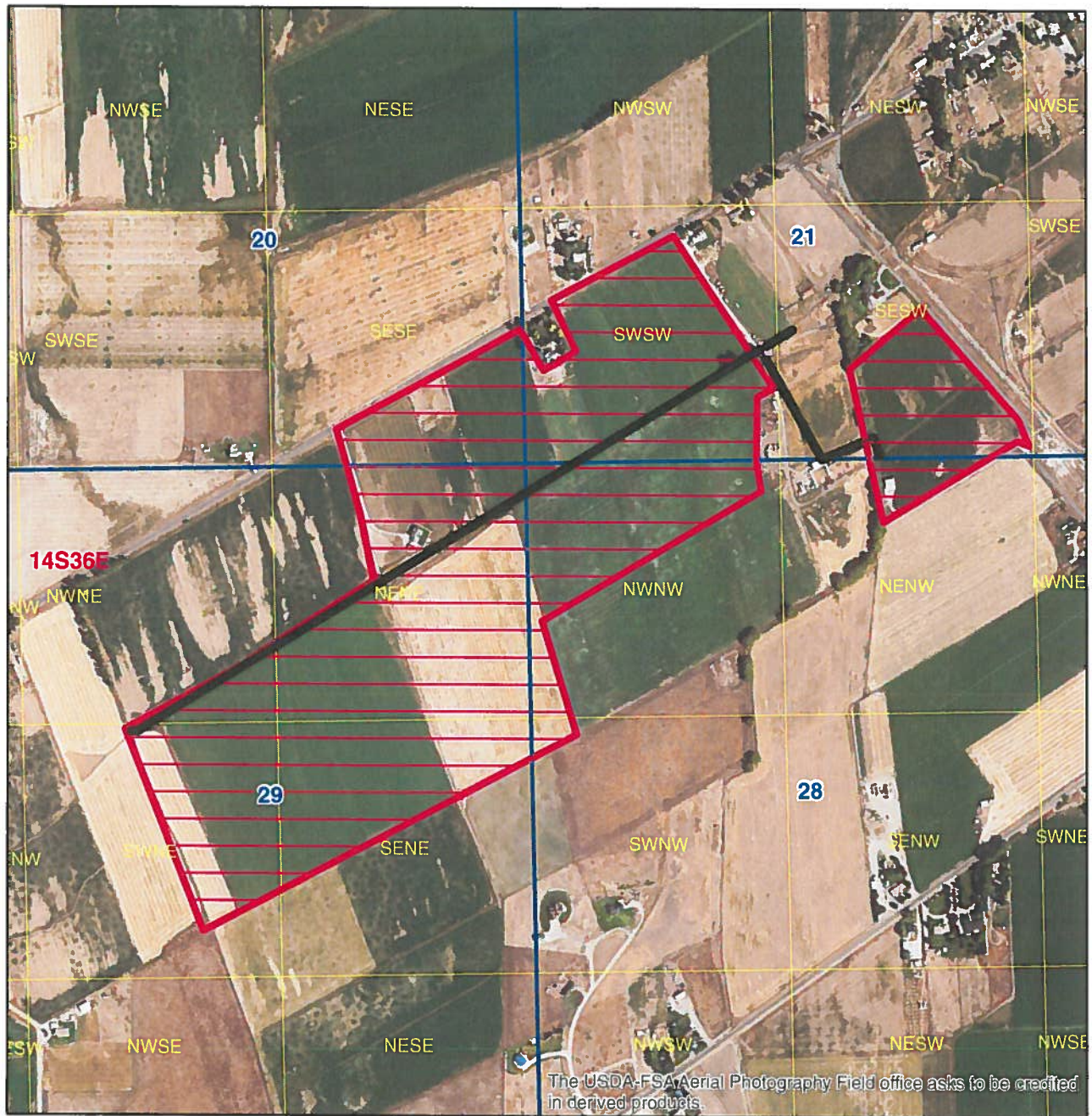
15-7153 POD and POU



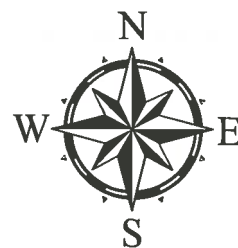
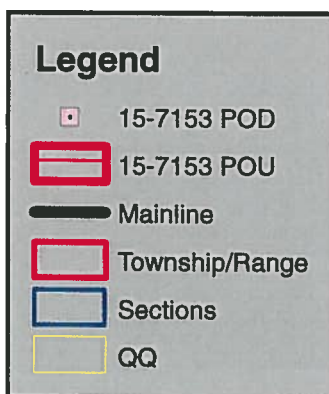
2013 Imagery



15-7153 POD and POU & Mainline



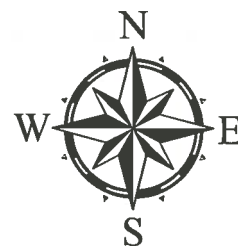
2013 Imagery



[illegible]

Legend

	15-7153 POU
	15-7361 POU
	Township/Range
	Sections
	QQ

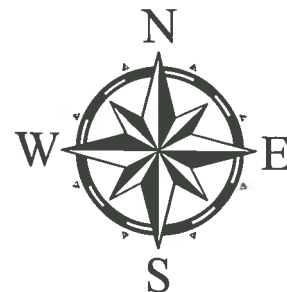


0 0.1 0.2 0.4 Miles

[illegible]

Legend

-  Actual Developed POU
-  Township/Range
-  Sections
-  QQ



0 0.125 0.25 0.5 Miles



	4 'VELOCITY	'FLOW RATE	'+TOTALIZER
	ft/s	gal/min	gal
9/4/2014 10:44	4.659	1099.5356	0
9/4/2014 10:44	4.595	1084.3497	0
9/4/2014 10:44	4.558	1075.728	0
9/4/2014 10:44	4.605	1086.8663	0
9/4/2014 10:44	4.714	1112.3786	0
9/4/2014 10:44	4.648	1096.8731	0
9/4/2014 10:45	4.614	1088.9144	0
9/4/2014 10:45	4.642	1095.3815	176.921
9/4/2014 10:45	4.694	1107.7982	361.135
9/4/2014 10:45	4.708	1111.04	543.624
9/4/2014 10:45	4.759	1123.0319	729.222
9/4/2014 10:45	4.797	1131.9635	918.932
9/4/2014 10:46	4.732	1116.8077	1106.581
9/4/2014 10:46	4.754	1122.0274	1292.52
9/4/2014 10:46	4.618	1089.9307	1476.622
9/4/2014 10:46	4.765	1124.5724	1661.318
9/4/2014 10:46	4.839	1141.968	1852.079
9/4/2014 10:46	4.892	1154.5053	2044.263
9/4/2014 10:47	4.856	1145.9788	2232.847
9/4/2014 10:47	4.736	1117.734	2418.987
9/4/2014 10:47	4.877	1151.0269	2608.514
9/4/2014 10:47	4.864	1147.8936	2799.969
9/4/2014 10:47	4.946	1167.3002	2991.86
9/4/2014 10:47	4.815	1136.3196	3183.39
9/4/2014 10:48	4.828	1139.3151	3372.716
9/4/2014 10:48	4.773	1126.5159	3558.667
9/4/2014 10:48	4.754	1121.9647	3746.072
9/4/2014 10:48	4.769	1125.4873	3934.334
9/4/2014 10:48	4.82	1137.4897	4123.039
9/4/2014 10:48	4.993	1178.4278	4313.11
9/4/2014 10:49	4.719	1113.7537	4505.144
9/4/2014 10:49	4.571	1078.7912	4686.735
9/4/2014 10:49	4.64	1095.0074	4868.806
9/4/2014 10:49	4.554	1074.8353	5050.239
9/4/2014 10:49	4.687	1106.0332	5232.52
9/4/2014 10:49	4.686	1105.8977	5417.421
9/4/2014 10:50	4.824	1138.4812	5606.476
9/4/2014 10:50	4.785	1129.2859	5795.931
9/4/2014 10:50	4.92	1161.1522	5985.116
9/4/2014 10:50	4.957	1169.8502	6177.217
9/4/2014 10:50	5.041	1189.5903	6373.766
9/4/2014 10:50	4.784	1128.9395	6566.906
9/4/2014 10:51	4.774	1126.5637	6753.896
9/4/2014 10:51	4.747	1120.1549	6939.599
9/4/2014 10:51	4.895	1155.2044	7129.109

9/4/2014 10:51	4.793	1131.1864	7320.709
9/4/2014 10:51	4.824	1138.4373	7511.112
9/4/2014 10:51	4.824	1138.4324	7700.011
9/4/2014 10:52	4.806	1134.0933	7889.604
9/4/2014 10:52	4.751	1121.2444	8076.892
9/4/2014 10:52	4.932	1163.8916	8267.8
9/4/2014 10:52	4.854	1145.4447	8460.145
9/4/2014 10:52	4.918	1160.5707	8652.498
9/4/2014 10:52	4.792	1130.9287	8844.155
9/4/2014 10:53	5.022	1185.2285	9035.705
9/4/2014 10:53	4.784	1128.9008	9227.272
9/4/2014 10:53	4.843	1142.9123	9420.249
9/4/2014 10:53	4.768	1125.2198	9609.294
9/4/2014 10:53	4.969	1172.7391	9800.774
9/4/2014 10:53	5.045	1190.6852	9997.565
9/4/2014 10:54	4.891	1154.2321	10189.917