

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
IN-OFFICE REVIEW/BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATIONPermit No: 57-11862

Exam Date: 10/21/2016

1. Does this qualify for an in-office field exam (IDAPA 035.02.r)? X Y N
- Irrigation of 5 acres or less
 - Storage of up to 14.6 AF for stockwater purposes only
 - Any use other than irrigation or storage, if the combined diversion rate is 0.24 cfs or less
 - Other < >

2. Current Owner: Name: Alvin and Tina Davison
- Owner of Record Correct? X Y N
- Address of Record Correct? Y N
- If No: Address

Tax lot data shows Alvin and Tina Davison as the owners of the property.

3. Beneficial Use Fees have been paid: X Y N Receipt No: C0

4. SOURCE TRIBUTARY

Ground Water

Method of Determination: Well Driller's Report, GIS and Taxlot Data

Change in Source: Y X N

B. OVERLAP REVIEW

1. Other water rights with the same place of use: NO Overlap

Water Right No.	Source	Purpose of Use	Basis
NONE			

Comments: Water right 57-4052 in the name of Owyhee County overlaps the place of use, but this right is the water supply for the town of Murphy. Murphy is not a municipality, so the County holds the domestic water rights for this property. The tax parcels described in this permit, is not one of the tax parcels listed on water right 57-4052. The permit holders appear to have an exempt domestic water right for their home and yard irrigation. The yard was not included in this irrigation permit by the permit holder, so I am assuming it is part of the exempt right.

2. Other water rights with the same point of diversion: NO Overlap

Water Right No.	Source	Purpose of Use	Basis
NONE			

Comments: Water right 57-4052 has a well in the same 40 acre tract, but it is in the Northwestern corner of the tract and the well for this permit is in the southeastern corner of the tract. No other water rights are officially diverted out of this well. However, the permit holder appears to either use this well or another well on the property for their exempt domestic use for their home and a 1/2 acre of yard irrigation.

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

Source	Govt. Lot	1/4	1/4	1/4	Sec.	Twp.	Rge.		County
Ground Water			SE	SE	27	2S	2W	B.M.	OWYHEE
								B.M.	
								B.M.	

Method of Determination: GIS and Tax Lot data.Change in POD? X N Amendment Required? X N **2. PLACE OF USE:** 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	
2S	2W	27																2.5	2.5
		Lot #																	
Total Acres =																			2.5

Method of Determination: Staff Photos, GIS and Tax Lot DataChange in POU? X N Amendment Required? X N Delivery System Diagram Attached (required). Indicate all major components and distances between components.

Indicate weir size/pipe as applicable.

 X Aerial Photo Attached (required for irrigation of 10+ acres). 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
WELL	Unknown				

*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
NONE						

2. Measurements: No measurement is required for an in-house exam.

E. FLOW CALCULATIONS

____ Additional Computation Sheets Attached

Measured Method:

A theoretical calculation was not used on this permit. There is nothing in the information supplied that provides the Hp of the well pump.

Acre Limits = 2.5 acres X 0.03 cfs per acre = 0.075 cfs

Permit allowed = 0.12 cfs

I am recommending a diversion rate of 0.08 cfs, since maximum rate per acre is the limiting factor for this permit.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 2.5 \text{ acres} \times 4.5 \text{ af/ac} = 11.25 \text{ af}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.08 \text{ cfs} \times 260 \times 1.9835 = 41.3 \text{ af}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 11.3 \text{ af}$$

2. Volume Calculations for Other Uses:

N/A

G. PURPOSE OF USE

Irrigation ☒ Y ☐ N # Stock _____ Domestic # of Homes _____

Other: < >

Change in Purpose of Use? ☐ Y ☐ N

Method of Determination: Taxlot data and conversations with owner.

If Yes: From Use _____ To Use _____ Amount _____ CFS _____ AFA _____

H. NARRATIVE/REMARKS/COMMENTS

This permit is qualifies for an in-house exam. This permit is an irrigation right for a small 3.8 acre parcel. The permit didn't include the home or the yard area, so I am assuming they are either part of the Murphy water system, or are using this well or another well for the home as an exempt domestic use including the yard. This right is only for the pasture areas. A review of the Sentinel Satellite system suggests that only 1.6 acres were irrigated in 2016. I sent maps and a letter to the permit holder to verify the area that appears to be irrigated. The permit holder sent the map back without any pictures, therefore, Staff working in the area agreed to drive by the property and take some photos of the place of use. After reviewing the photos taken by Staff, I have determined that 2.5 acres were irrigated within the tax parcel owned by the permit holder. It does appear as though the permit holder did clear land outside their tax parcel, but they clearly stated in their application for permit that they only applied to irrigate land they owned. Therefore, 2.5 acres is the maximum amount I can recommend for this permit.

Condition 1 (046) will be removed at licensing. Condition #2 (121) will be changed to condition 103 as is standard. Condition 3 (R69) will be carried forward to licensing.

Have conditions of permit approval been met? ☒ Yes ☐ No

I. 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	0.08 CFS	11.3 AF
<u>Totals:</u>		0.08 CFS	11.3 AF

2. Recommended Amendments

___Change P.D. as reflected above ___Add P.D. as reflected above ___None

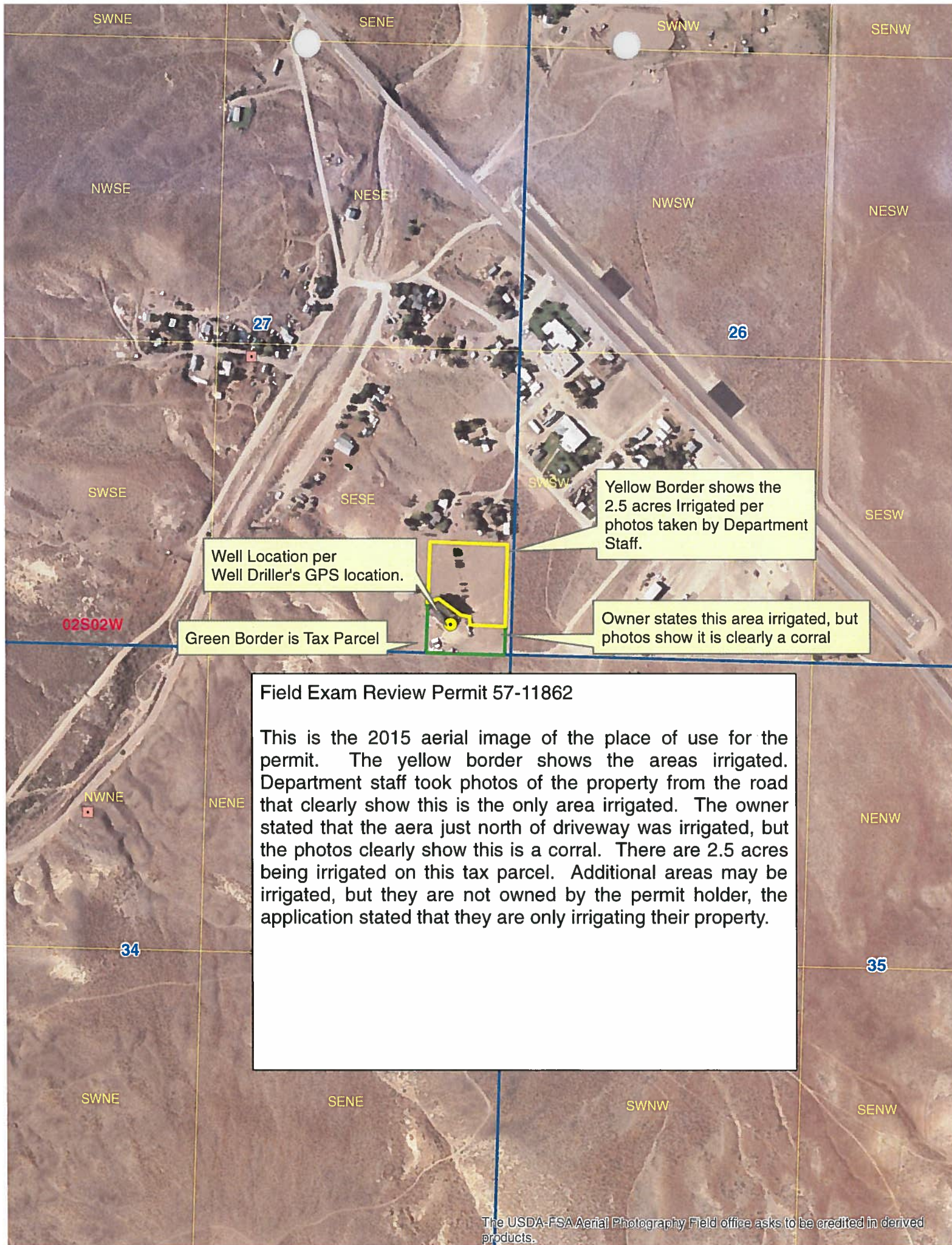
___Change P.U. as reflected above ___Add P.U. as reflected above ___None

Other: < >

J. AUTHENTICATION – DANIEL A. NELSON – STAFF HYDROLOGIST

Field Examiner's Name  Date 11-9-16

Reviewer _____ Date _____



Well Location per
Well Driller's GPS location.

Green Border is Tax Parcel

Yellow Border shows the
2.5 acres Irrigated per
photos taken by Department
Staff.

Owner states this area irrigated, but
photos show it is clearly a corral

Field Exam Review Permit 57-11862

This is the 2015 aerial image of the place of use for the permit. The yellow border shows the areas irrigated. Department staff took photos of the property from the road that clearly show this is the only area irrigated. The owner stated that the area just north of driveway was irrigated, but the photos clearly show this is a corral. There are 2.5 acres being irrigated on this tax parcel. Additional areas may be irrigated, but they are not owned by the permit holder, the application stated that they are only irrigating their property.



Well Location per
Well Driller's GPS location.

Yellow Border shows the
1.6 Acres Irrigated per
9/9/2016 satellite imagery

Field Exam Review Permit 57-11862

This is the 9/9/2016 Sentinel Satellite image of the place of use for the permit. The areas in red show where grass or crops are actively growing. According to this satellite image, there is only 1.6 acres of irrigation shown in the yellow border that has been accomplished during the development period. The green border is the permit holder's tax parcel according to Department records.



Google Earth



Permit 57-11862

PHOTOGRAPHER AND DATE OF PHOTOS Jes Erling 11/7/2016

FILE NUMBER 57-11862



These are photos taken from the road of the property associated with permit 57-11862. In the photos you can see that from the large barn to the white fenced entry way they have corrals that haven't been irrigated. The photos also show the field east of the row of trees down the center of the property has been irrigated. Therefore, the lands actually irrigated are the lands east and north of the barn.



Well Location per
Well Driller's GPS location.

Yellow Border shows the
1.6 Acres Irrigated per
9/9/2016 satellite imagery

Permit Review for 57-11862

This photo is the 2015 aerial photography for the property associated with the permit. The yellow border is the lands that appeared to have been irrigated in the 2016 Sentinel Satellite photos. I included this aerial photo because it provides better definition of the property and the location of the land being irrigated. The green border is the permit holder's tax parcel.

abn Davis - all inside Penline is irrigated.

RECEIVED

OCT 25 2016

DEPARTMENT OF
WATER RESOURCES



State of Idaho

DEPARTMENT OF WATER RESOURCES

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C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

October 21, 2016

ALVIN DAVIDSON AND
TINA DAVISON
PO BOX 35
MURPHY ID 83650

RE: Water Appropriation Permit 57-11862

Verification of Place of Use

Dear Mr. and Ms. Davison:

In 2015 the Idaho Department of Water Resources (Department) issued permit 57-11862 (permit) authorizing the development of a right to divert 0.12 cfs of water for irrigation of 4 acres from a ground water well in the SE1/4 SE1/4 of Section 27, Township 2 South, Range 2 West in Murphy, Idaho. The Department received your "Statement of Completion for Submitting Beneficial Use" on October 13, 2016. The final step in the water appropriation process is the issuance of a Water Right License. By issuing a license, the Department recognizes that water has been put to beneficial use in accordance with the permit and limited to the amount of land actually irrigated. For your convenience, I am enclosing a copy of permit listed above.

Due to the amount of water being diverted, this permit qualifies for what is known as in-house exam or desk top verification review instead of an in-field verification inspection of the property. A verification review is necessary to move this permit forward to a water right license. During my review of your file, I was able to verify all of the elements necessary to license your permit. However, due to the short development period, I wanted to make sure that I have the acres irrigated correct. I have enclosed two maps with this letter. The maps depict the following information:

The first map is a Sentinel Infrared Satellite image of your property taken on September 9, 2016. This image shows irrigated ground in red. From this image, it looks as though you are irrigating 1.6 acres (shown in the yellow border) in the northeastern pasture. It doesn't appear as though you have developed any additional irrigation in the east pasture or the southern portion of your property.

The second map is a 2015 aerial photo that shows your property prior to the actual development of the irrigation. I included this map as a reference, since it has better definition of the property than the Sentinel Infrared imagery.

Idaho Code prevents us from licensing more irrigation than what was developed at the time that you submitted your proof of beneficial use statement. Therefore, as thing stand, the most that I can license for this permit is the 1.6 acres shown in the attached maps unless you can provide proof that you are actually irrigating more land than the imagery available shows. You can accomplish this by taking photos of the property that clearly demonstrates what is currently being irrigated.

If you feel it would be more beneficial, you can request that IDWR personnel go into the field to collect this information accompanied by yourself or your representative. For this to occur, please contact me within 30 days. If you would like a representative to be present, please have the name, telephone number, and email of your representative. Be aware that you and the representative must be available to be contacted for scheduling of the required visit by November 21, 2016.

Please provide the requested information November 21, 2016. If I do not receive the requested information or I have not been contacted by you by November 21, 2016, I will consider the map correct and move forward with licensing the permit for the 1.6 acres.

If you have any questions, please contact me. Thank you for your attention to this matter.

Respectfully,



Daniel A. Nelson
Staff Hydrologist
Telephone # (208) 287-4867
Fax (208) 287-6700 (attn: Dan Nelson)
Email dan.nelson@idwr.idaho.gov

Enclosure(s): Computer generated water right permit report
September 9, 2016 Sentinel Infrared Image
2015 Aerial Photo