

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-11670

Exam Date:
6/5/2012

1. Current Owner: CLINTON R WISSEL
15451 MIDWAY RD
NAMPA ID 83651
(208)466-1606

And/Or

JUDITH E WISSEL
15451 MIDWAY RD
NAMPA ID 83651
(208)466-1606

2. Accompanied by: **Clinton Wissel**

Phone No: **same as above**Address: **same as above**Relationship to Permit Holder: **same**

3. **SOURCE**

TRIBUTARY

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: **partial overlap with 63-8292**
2. Other water rights with the same point of diversion: **none**

C. DIVERSION AND DELIVERY SYSTEM

1. **LOCATION OF POINT(S) OF DIVERSION:** **N 2287851, E1380178 [43.592, -116.628]**

GROUND WATER L4 SW1/4SW1/4 Sec. 18, Twp 03N, Rge 02W, B.M.
CANYON County

Method of Determination: **GPS**

2. **PLACE OF USE:** IRRIGATION

TwpRgeSec	NE				NW				SW				SE				Totals
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
03N02W18									34.0	21.0							55.0
									L 3	L 4							
03N03W13													16.0	4.0			20.0

Total Acres: 75

Method of Determination:

3. x Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable. **See photographs**

 x Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater. **See aerial**

 x Aerial Photo Attached (required for irrigation of 10+ acres).

 x Photo of Diversion and System Attached

4.

<u>Well or Diversion</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Pump Serial No. or Discharge Size</u>
<u>well</u>	<u>GE</u>	<u>25</u>	<u>ID# 5K2840NM4JH3A</u>	<u>unknown</u>	<u>unknown</u>

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

D. FLOW MEASUREMENTS

1.

<u>Measurement Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
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2. Measurements: **none taken**

E. FLOW CALCULATIONS Additional Computation Sheets Attached

1 – theoretical calculation using 70% efficiency, 10 psi for open discharge system, 25 hp, 75' pumping level:

$$\frac{[8.8] [25] [0.7]}{74 + [10] [2.31]} = \frac{154}{97.1} = 1.59 \text{ cfs}$$

2 – IDWR standard of 0.02 cfs/ acre = 75 acres x 0.02 cfs = 1.5 cfs

Measured Method: **none taken**

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 75 \times 4.5 \text{ af/ac} = 337.5 \text{ afa}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 1.5 \times 260 \times 1.9835 = 773.6 \text{ afa}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 337.5 \text{ afa}$$

2. Volume Calculations for Other Uses: **not applicable****G. NARRATIVE/REMARKS/COMMENTS**

Permit no. 63-11670 was approved for 180 acres and 3.6 cfs of water from what is referred to as an M or moratorium well. The water supplements the Pioneer Irrigation shares appurtenant to the property. Proof was timely filed and the correct fee was paid. By about 2004 the permittee Mr. Wissel sold much of the property but he kept the water rights. The conveyance documents specified no water rights were included in the property transactions. The total acres in the place of use found during the exam were 75 acres.

The 16-inch diameter well is piped via 8 inch diameter steel pipe to either [1] a 6 inch pipe connected to an 8 inch rubber hose for irrigation the west field or [2] to 8 inch PVC pipe partially buried in gravel road, across ditch to an drip irrigation system for west field or [3] to an open corrugated steel collector about 36 inches in diameter imbedded in the ground. For most of the place of use, the water is diverted from the collector and dumped directly into a concrete lined ditch and then to a system of open concrete-lined or plastic lined ditches or 6-inch buried PVC pipe to the fields. For the field west of the well, the water is diverted from the corrugated steel collector from a PVC and canvas looking removable pipe that can be connected to underground pipe that crosses the irrigation ditch and then connected to a drip irrigation system.

There are no POD overlaps. Twenty acres of the POU, the fields in Section 13, are also licensed under 63-8292 in the name of John Wissel, from a ground water source. The point of diversion for 63-8292 a different well. It is licensed for the full inch per acre but I recommend these acres in Section 13 remain in this POU because surface water is used on these fields and this well can still supplement the fields. Permit condition 03A will limit the irrigation to 0.02 cfs per acres for all rights so that the rights cannot be unstacked if Mr. Wissel continues to sell property

Mr. Wissel stated that he uses the supplemental water nearly every year. Siphon tubes were seen along some of the ditches. Mr. Wissel does not use a sprinkler system. Mr. Wissel said the well is a very good producer. According to documents he had from the pump company and his conversations with them, the pump is set at 80 feet bgl and pumping water level is 74 feet bgl.

A theoretical calculation using 25 hp, a 74 feet bgl dynamic pumping level per Mr. Wissel, 10 psi for the open discharge system, yielded a diversion rate of 1.59 cfs. Using the standard 0.02 per acre x 75 acres, the result is a diversion rate of 1.5 cfs and this is the quantity to be recommended for licensing. The annual volume to be recommended is 337.5 afa, the lesser volume of the Vr and Vd calculations.

Regarding the water bearing zone condition, the well log appears to indicate that this condition has not been met because it states that the well is screened from 305 feet to 70 feet. However, the second page of the well log shows three screened intervals that meet the condition that the zone is from 100 feet to 300 feet.

Conditions 066 and 067 are not current standard conditions. If these conditions are modified to 01M, the conditions would be met. Steve Lester approved this modification.

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

Modify conditions 066 and 067 to 01M.

H. RECOMMENDATIONS

1. Recommended Amounts

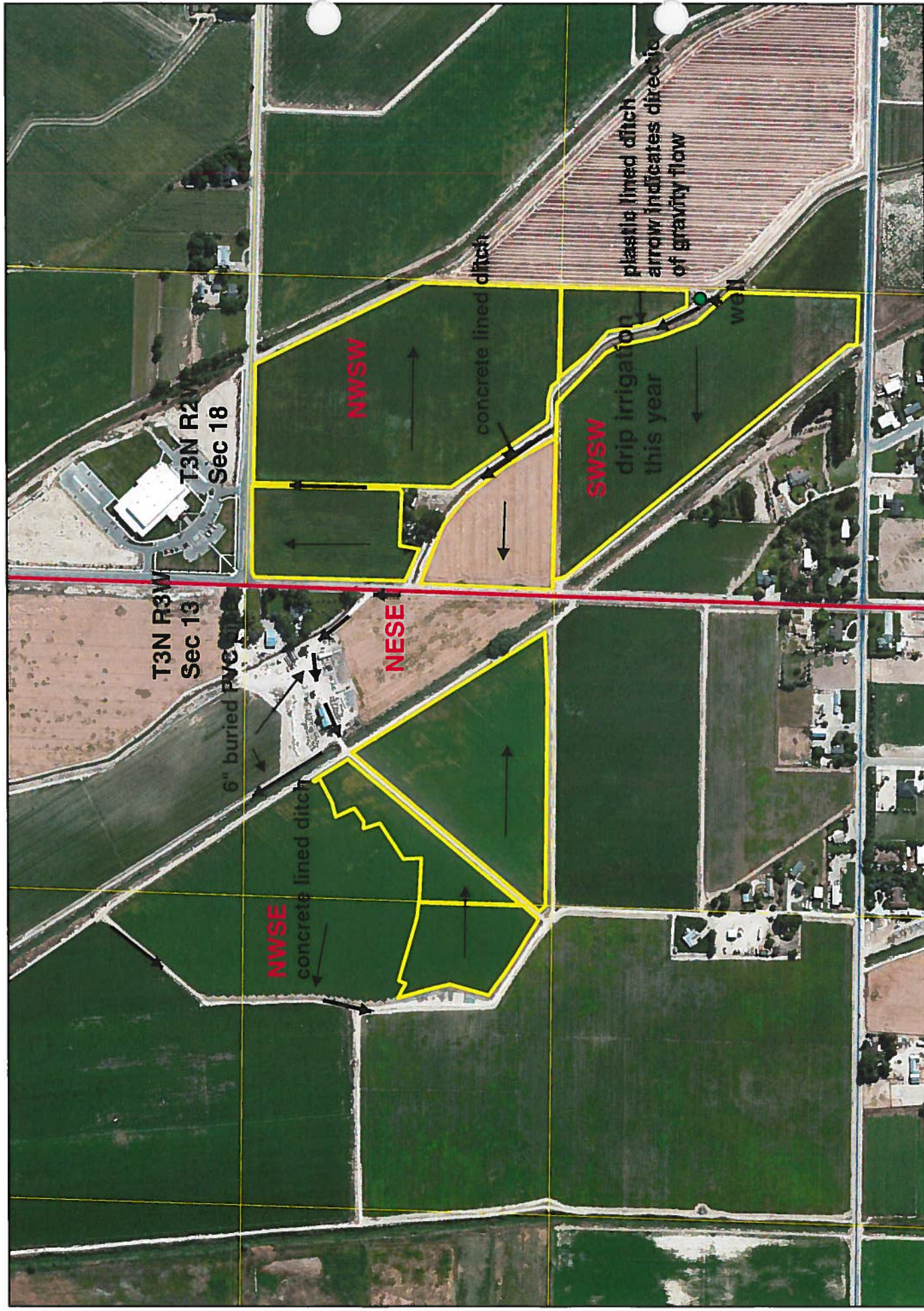
<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	03/1 to 11/15	1.500 CFS	
<u>Totals:</u>		1.500 CFS	337.50 AF

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 Wing V. V. C. Date 6-11-12
Reviewer _____ Date _____

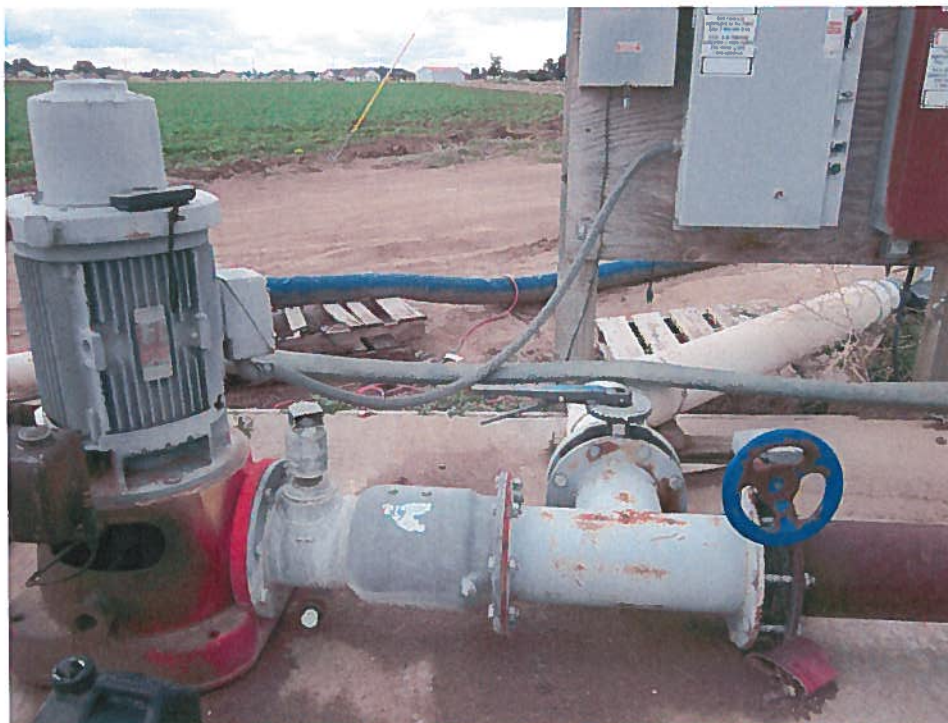


63-11670-- 2011 aerial photo. POU - fields outlined in yellow. Black arrows indicated direction of water flow in delivery system and on fields.

63-11670 Field exam photographs



Well. Fertilizer system seen to left. Steel pipe from well seen front right.



Water can be pumped via the PVC pipe seen center which connects to partially buried pipe, across ditch for field [see next photo] to the west of well for a drip irrigation system.



Pipe from well to west field for drip irrigation system.



Water can also be diverted via the valve seen center for diversion to the west field if drip irrigation is not being used in that irrigation season. There is a pressure pump for the drip system seen to left of collector. The water is also pumped to this corrugated steel collector and then flows in to the concrete lined ditch seen next photo for irrigation of all fields except field west of well.



Pipe from corrugated steel collector to open concrete lined ditch.



Another view of well and various components of the diversion system.