

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 63-32569

Exam Date: 5/8/2012

1. Current Owner: VAN SLYKE FARMS INC
17605 VAN SLYKE RD
PO BOX 39
WILDER ID 83676
(208) 250-1398
2. Accompanied by: Howard Van Slyke
Phone No: same
Address:
Relationship to Permit Holder: Owner

3. SOURCE TRIBUTARY
GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: None
2. Other water rights with the same point of diversion: 63-2857

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

GROUND WATER SW1/4NE1/4 Sec. 6, Twp 03N, Rge 04W, B.M.
CANYON County

Method of Determination: GPS and Arc Map

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	
03N	04W	6			4.0	16.0			1.0										21.0

Total Acres: 21

Method of Determination: ArcMap and a local survey corner marker for the NE corner of Sec 6 SENE.

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>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Pump Serial No. or Discharge Size</u>
<u>ID No.*</u>					
Submersible	_unk_	40_	_____	_____	4"

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

D. FLOW MEASUREMENTS

1.

<u>Measurement</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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Theoretical calculations only

$$\text{System} = 82 \text{ heads @ } 2.8 \text{ gpm} = 229.6 \text{ gpm}$$

$$\frac{(40) \text{ Hp} * 8.8 * 0.7}{(80) \text{ PSI} * 2.31} + 200 \text{ ft} = 0.64 \text{ cfs}$$

$$229.6 \text{ gpm} / 448.8 = 0.51 \text{ cfs}$$

2. Measurements:

Permit Rate (irrigation)	=	0.60 cfs
Proof Pd (\$_100.00_)	(max cfs) =	1.00 cfs
Found POU acres _21_	* 0.02 cfs/ac =	0.42 cfs *

E. FLOW CALCULATIONS

_____Additional Computation Sheets Attached

Measured Method:

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 21 * 4.5 = 94.5 \text{ afa}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.42 * 260 * 1.9835 = 216.6 \text{ afa}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 94.5 \text{ afa}$$

2. Volume Calculations for Other Uses: n/a

G. NARRATIVE/REMARKS/COMMENTS**CURRENT SYSTEM**

No canal water has been used on this property. The current system is a 40 HP pump delivering water to the POU through buried mainlines to hand lines using Nelson windfighter heads with 7/64 in nozzles operating at 80 PSI. The system was installed in April of 2012. Maximum operation is 82 heads at any given time. Van Slyke thought that the heads delivered 2.8 gpm. 2.8 gpm * 82 heads = 229.6 gpm or 0.51 cfs. There is no domestic use associated with this well. A Lane Pump invoice for the upgrade shows 11 joints of 4 in by 21 ft pipe which would place the pump at approximately 230 ft. I estimated the dynamic pumping level at 200 ft. Theoretical calculations based upon 40 HP, 200 ft, and 80 psi = 0.64 cfs. The system at the time of Proof of Beneficial use was 50 hp and a mix of operations. Part of the POU was sprinkler irrigation via hand lines and part was open discharge into a pond and then relifted via a booster pump.

If this well were to ever be delivered to the decreed POU for 63-2857, the system would be open discharge into the canal at the POD and then rediverted at the decreed POU. Calculating a maximum capacity on the system at the time of proof of beneficial use and based upon open discharge gives 50 HP, 200 ft and 10 psi = 1.38 cfs.

POU LOCATION CONFLICT

There is an apparent conflict with the physical location of the property. The N1/16th corner as shown in ArcMap is in conflict with a local survey made this year. The N1/16th corner was surveyed to be at the northeast corner of the communication tower lot. Physically I observed that the pin location was in line with the north boundary of the found POU and a fence line that runs east and west

as viewed in Gvt lot 3 (SEnw) of sec 6 (neighbors property to the west). The GPS location for the well is in alignment with visible physical features in the 2011 aerial photo. I returned to the property on June 21, 2012 and GPSed the survey corner. This point again matched the physical features in the ArcMap 2011 aerial photo. As it is not clear which information is correct I am basing my recommendation upon the survey marker which places the entire POU in the S½ of the N½ of section 6. Based upon that assumption I did find approximately 0.2 ac in the SENW which will require an amendment prior to licensing. Based upon rounding guidelines I am recommending 1 acre for that tract. Also based upon rounding I am recognizing 4 acres in the SWNE although I found 4.5 acres. Rather than rounding this tract up I rounded down to balance the overstated acreage in the SENW. This brings the total POU to 21 acres.

POD OVERLAP ANALYSIS

63-2857 was decreed to Van Slyke for the irrigation of 55 acres at 1.00 cfs in the S½SW¼ of sec 5 although he did not own the property. That right is for supplemental use only. The adjudication review identified the water use from the well at that time as being applied to some of the permitted POU for 63-32569 and to ground south of the canal but still in the S½NE¼ of sec 6. Ultimately it was not determined when the unrecorded change in place of use occurred and the recommendation reflected the original licensed POU. The POU associated with 63-2857 is owned by Rose Cottage LLC. Based upon information received from Howard Van Slyke and field observations, the well still is NOT being used on the Rose Cottage property nor was there ever any discussion regarding the use of the well on the Rose Cottage property when the sale was made. To the best of my knowledge, Rose Cottage LLC has not filed for a change of ownership and probably does not even realize that it is appurtenant to their property.

The theoretical calculation shown in the Current System above gives a system capacity of 1.38 cfs based upon open discharge and a slightly shallower dynamic level. The current system is not designed to allow both rights to be operated concurrently.

As this right is a primary groundwater right, I recommend that this right be licensed at 0.42 cfs. The overlapping right 63-2857 is a supplemental right that may never be used again. When combined, the system capacity of 1.38 cfs would be the limiting rate.

Volume calculations:

76 ac * 4.5 afy = 342 afa

260 days * 1.9835 * 1.38 cfs = 711.7 afa

The system capacity is sufficient to supply the volume requirements for both rights.

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	03/01 to 11/15	0.420 CFS	94.50 AF
<u>Totals:</u>		0.420 CFS	94.50 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 Kelly L. Christensen Date 5-14-2012

Reviewer _____ Date _____

Permit # 63-32569

Exam date _5-8-2012_

Agent _KKC_

POU boundary shift

FIELD EXAM MAP

Aerial photo date 2011

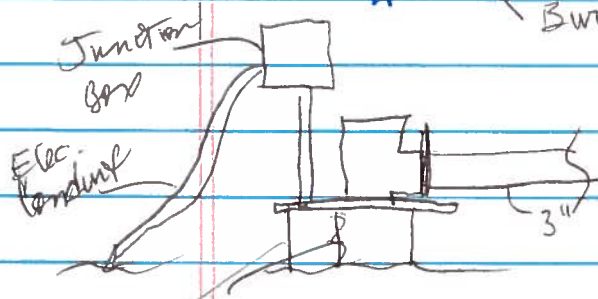
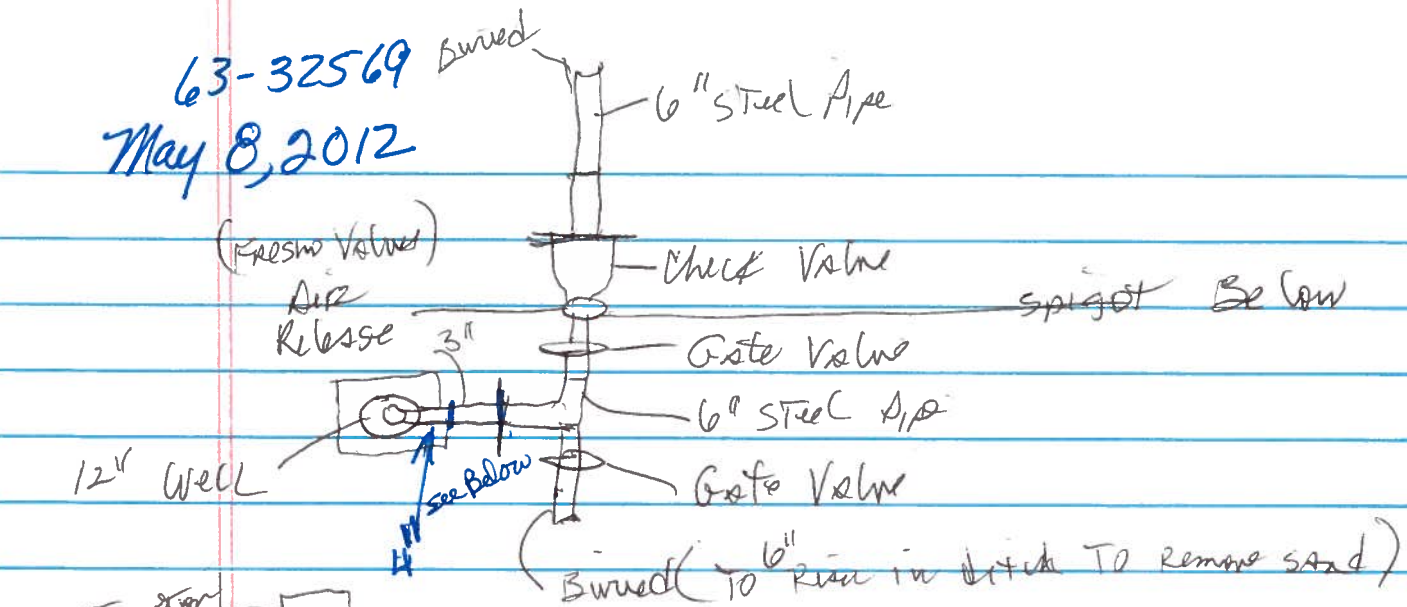
Twp Rng Sec

3N 04W 6

N1/16th corner survey marker



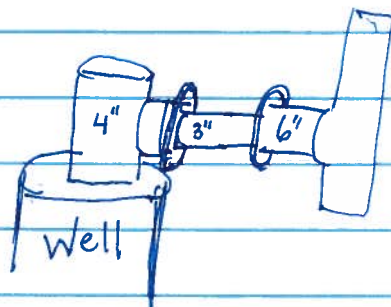
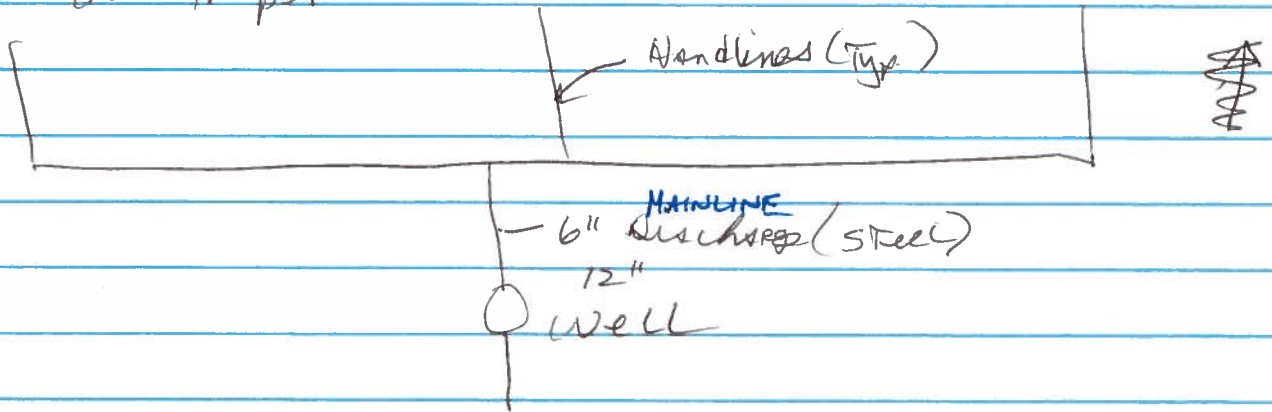
63-32569
May 8, 2012



Power Pole 03N
04W
06
09

12" Well

80-90 psi



Layne of Idaho, Inc.

Remit to:

PO Box 1005

Nampa ID 83653

Phone: 208-466-7376

Fax: 208-466-5078

INVOICE

Invoice Number: 14048

Invoice Date: Apr 10, 2012

Page: 1

*Received from
Van Slyke @ Field exam 5-8-12***Bill To:**Van Slyke Farms, Inc.
PO Box 39
17605 Van Slyke Rd
Wilder, ID 83676

Phone: 208-250-1398

Fax:

Ship to:Van Slyke Farms
PO Box 39
17605 Van Slyke Rd
Wilder, ID 83676

Customer ID	Customer PO	Payment Terms	
VANS001		Net 30 Days	
Sales Rep ID	Work Order No.	Ship Date	Due Date
	0212-011		5/10/12

Quantity	Description	Unit Price	Amount
	Location: VanSlyke Rd, N. 1/2 mile, W.		
	50 HP 6 stage submersible pump, set: 230 - 8 X 2-1/2 X 1-1/2		
	Original Estimate, includes:		12,847.00
1.00	Set		
	New Submersible Pump, including:		
1.00	Franklin 4 Stage 8" pump & 40hp Motor		
1.00	Lot of plugs, nipples, couplings, nuts, bolts, gaskets and flanges		
1.00	4" DI Check Valve		
11.00	4" x 21' Galv T&C Pipe		
1.00	24 x 24 Steel Plate		
1.00	Electrical Work & Materials		
	Additional work:		
1.00	Pull	1,120.00	1,120.00
1.00	Teardown Old Pump	150.00	150.00
1.00	Video Well	780.00	780.00
	Credit for Pipe		-1,200.00

Subtotal	13,697.00
Sales Tax	
Total Invoice Amount	13,697.00
Payment/Credit Applied	
TOTAL	13,697.00

Check/Credit Memo No:

We will add finance charges on invoices more than 30 days overdue.

PHOTO 1**FIELD EXAM PHOTOS**

63-32569

PHOTO DATE 6-21-2012

You are looking west in this photo that shows the survey stake description.

3N, 4W, Sec 5 SW corner of Gvt lot 4

**PHOTO 2****FIELD EXAM PHOTOS**

63-32569

PHOTO DATE 6-21-2012

You are looking west across Van Slyke Rd
Corner marker shown in photo 1

**PHOTO 3****FIELD EXAM PHOTOS**

63-32569

PHOTO DATE 6-21-2012

You are still looking west from the northwest
corner of the tower lot at the POU. POD

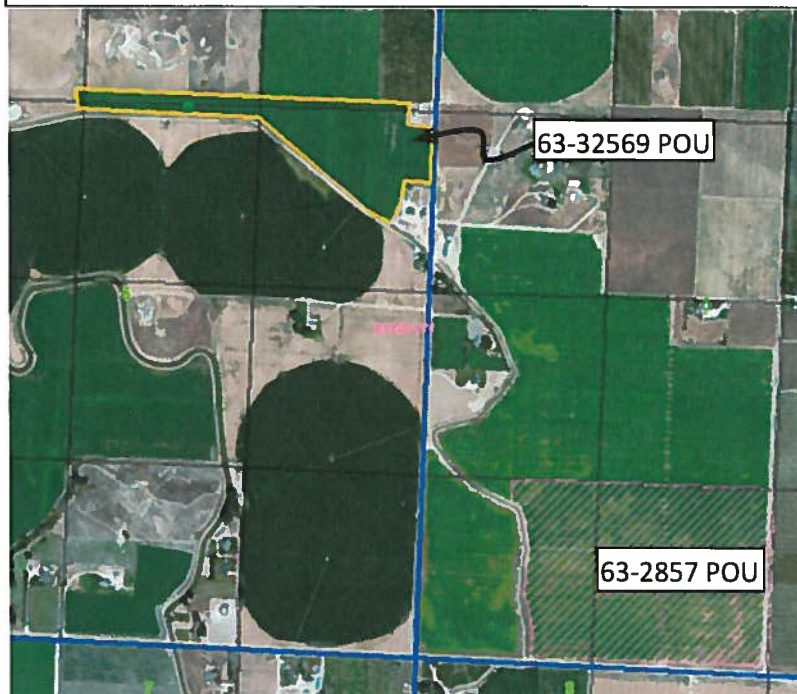


POD OVERLAP OVERVIEW

63-32569 overlap analysis
3N, 4W, Sec 6 S½NE¼

63-2857 overlapping right
3N, 4W, Sec 5 S½SW¼

2011 aerial photo



63-32569

FIELD EXAM PHOTO 5-8-2012

This photo is looking east across the pod and the eastern portion of the POU.

N 1/16th corner of Sec 6 just over hill along road



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Agent

RKC

FIELD EXAM MAP

Aerial photo date 2011

Twp Rng Sec

3N 04W 6



Nelson
wind fighter 7/64
heads
max 82 2.8

80 to 90 LBS
to get f. fly @ tower

GPS 22693 24
1384831