

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 67-15094

Exam Date: 4/24/2017

1. Current Owner:
LACEY RANCH 3167 GOODRICH RD CAMBRIDGE ID 83610 (208)880-5380
2. Accompanied by: ARTHUR LACEY
Phone No: 208-880-5380
Address: 3167 GOODRICH RD CAMBRIDGE ID 83610
Relationship to Permit Holder: OWNER

3. **SOURCE:**
GROUND WATER

TRIBUTARY:**B. OVERLAP REVIEW**

1. Other water rights with the same place of use: LOST VALLEY RES CO; CAMBRIDGE DITCH CO
2. Other water rights with the same point-of-diversion: 67-8010

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

GROUND WATER L4 (NW¼NW¼) Sec. 4, Twp 14N, Rge 02W, B.M. WASHINGTON County

Method of Determination: GPS: 44d 35.106 -116d 35.680. DIGITAL PLS 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	
15N	02W	33										3.0	29.0	2.0					34.0

Total Acres: 34

Method of Determination: ARCMAP TOOLS USED TO MEASURE IRRIGATED GROUND USING 2013 - 2015 IMAGERY.

3.

Delivery System Diagram Attached (required). Indicate all major components and distances between components.

☒ X Indicate weir size/pipe as applicable.☒ 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.☒ X Aerial Photo Attached (required for irrigation of 10+ acres).☒ X Photo of Diversion and System Attached

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
D0000425	GE	50	60075743	WASHINGTON VERTICAL PUMP CORP	VTP-54317 6" discharge

*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
McCROMETER FLOWMETER	PROPELLER	McCROMETER		99 9857		

2. Measurements: MEASURING DEVICE INSTALLED ON SYSTEM LOCATED AT WELL DISCHARGE POINT.

E. FLOW

Additional Computation Sheets Attached

CALCULATIONS

Measured Method:

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 34 \text{ ac} \times 4.0 \text{ af/ac} = 136.0 \text{ af}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.68 \times 231 \times 1.9835 = 311.6 \text{ af}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 136.0 \text{ af}$$

2. Volume Calculations for Other Uses: NONE.

G. NARRATIVE/REMARKS/COMMENTS

Field exam was conducted on April 24, 2017. I was accompanied by Art Lacey at the well location.

Ownership of the permit is in the name of Lacey Ranch. Lacey Ranch is not a registered company according to IDSOS database search. Current Washington County taxlot data shows Mr. Lacey owns the land pertinent to the place of use. Changes to ownership are not required.

Ground water comes from a well drilled in January of 1999. A well drillers report was found under tag D0000425. At the time of the exam, a 50 hp GE motor provided water to a pivot under this permit and a wheel line system under license 67-8010.

Flow measurements could not be collected with the Panametrics unit I brought since a long enough stretch of pipe was not exposed. Mr. Lacey had installed a McCrometer propeller device at the well location. Since there were concerns of freezing still present this early in the irrigation season, Mr. Lacey expressed reservations about filling the pivot lines. The well was still turned on to open discharge the water. The measuring device at this time read just over 500 gpm with a pressure of about 11 psi. Mr. Lacey said that when he runs it through the pivot, the flow is reduced to 300 gpm and 55 psi at the well. Elevation head creates a pressure of about 80 psi at the pivot below. The precipitation chart found in the pivot box describes a system set to run at 350.19 gpm. All of this information suggests the user is capable of diverting the full allowable rate authorized by the permit.

Overlap review finds irrigation district rights on the land. Mr. Lacey expressed that he maintains his shares and uses the well in supplementary fashion. 67-8010 is another irrigation right owned by Lacey Ranch on another parcel of land. Diversions observed from the well suggest it is capable to deliver both water rights simultaneously if needed. A combined use limit is not recommended.

The precipitation chart suggests 37.33 acres under the pivot pipe and 12.72 under the end gun. The place of use has a unique shape since not all of the land under the pivot is irrigated due to rock and pond. Historical imagery outlines a shape of 34 acres, reducing the permit by 1 acre. This acre is the difference in rate between the permit and license.

Have conditions of permit approval been met? X Yes No

Permit	0.70 cfs
B.U. Standard Allowance	0.68 cfs
B. U. Proof Fee	\$100 → 0.20 to 1.00 cfs
Measurement or Theoretical Rate	1.11 cfs
License Recommendation	0.68 cfs

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
IRRIGATION	03/15 to 10/31	0.68 CFS	136.0 AF
<u>Totals:</u>		0.68 CFS	136.0 AF

2. Recommended Amendments

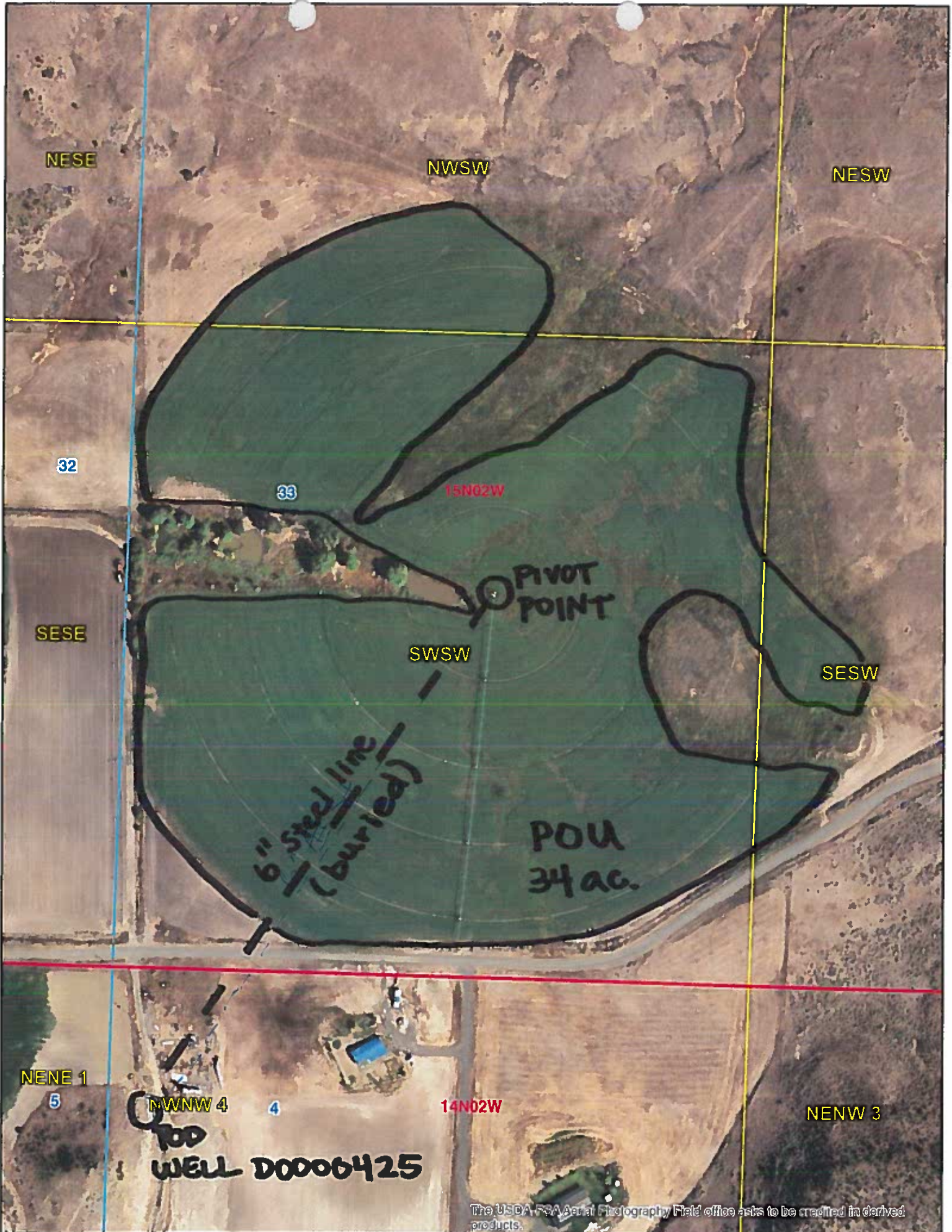
☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ None

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

I. AUTHENTICATION

Field Examiner's Name Patrick Kelly Date 4-24-2017

Reviewer _____ Date _____



IDAHO DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPORT

Use Typewriter or Ballpoint Pen

94540

Office Use Only			
Inspected by _____			
Twp _____		Rge _____ Sec _____	
_____ 1/4 _____ 1/4 _____ 1/4			
Lat: _____		Long: _____	

1. DRILLING PERMIT NO. D.O.O.O.O. 425
Other IDWR No. 67-97-W-0077-0002. OWNER: Lacey Ranch Construction
Name _____
Address 3167 Goodrich Rd
City Cambridge State Id Zip 83610

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

N		
X		
S		

Twp. 14 North ☒ or South ☐
Rge. 02 East ☐ or West ☒
Sec. 4 SE 1/4 NW 1/4 NW 1/4
Gov't Lot _____ County Cambridge
Lat: _____ Long: _____
Address of Well Site 1 1/2 miles east of
Fort Peder Goodrich Rd City Cambridge
(Give at least name of road + distance to road or landmark)

Li. _____ Bld. _____ Sub. Name _____

4. USE:

- ☐
- Domestic
- ☐
- Municipal
- ☐
- Monitor
- ☒
- Irrigation
-
- ☐
- Thermal
- ☐
- Injection
- ☐
- Other _____

5. TYPE OF WORK check all that apply (Replacement etc.)

☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK		AMOUNT		METHOD
Material	From	To	Sacks or Pounds	
Bentonite	0	66+	675 lbs	Down
Water Cement	66+	80+	105 lbs	Down
Clay	80+	146		

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 146
Was drive shoe seal tested? ☒ Y ☐ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
12.75	3	146	250	Steel	☒	☐	☒	☐
10.75	140.5	227.5	250	Steel	☐	☒	☒	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

☒ Perforations Method Torch
☐ Screens Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
147	227.5	1/2" x 1/4"	1000	10.75	Steel	☐	☒

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

14 ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control devices: _____

11. WELL TESTS:

☐ Pump ☐ Baller☐ Air ☐ Flowing Artesian

Yield gal/min.	Drawdown	Pumping Level	Time
400?	NA	200	under 5

Water Temp. 65.2 Bottom hole temp 65.2Water Quality test or comments: AgonizedDepth first Water Encountered 147

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
17	0	44	Hard Baker Clay		X
15	44	128	Clay		X
15	128	140	Hard Baker Clay-Shale		X
14	140	146	Hard Baker Clay-Shale		X
11.68	146	147	Hard Baker Clay-Shale		X
	147	148	Broken Basalt	X	
	148	151	Hard Basalt		X
11.68	151	153	Broken Basalt	X	
	153	157	Hard Basalt		X
11.68	157	166	Broken Basalt	X	
	166	171	Hard Basalt		X
	171	177	Broken Basalt	X	
	177	179	Hard Basalt		X
11.68	179	188	Broken Basalt	X	
	188	195	Hard Basalt		X
	195	218	Broken Basalt	X	
11.68	218	227.5	Firm Basalt		X

C/R Concentric Shoe on
Bottom of 10" liner

RECEIVED

RECEIVED

FEB 04 1999

FEB 03 1999

MICROFILM

Department of Water Resources

WATER RESOURCES
WESTERN REGION

MAR 08 1999

Completed Depth 227.5 (Measurable)
Date: Started July-August 98 Completed 1-24-99

13. DRILLER'S CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name POD, inc Firm No. 589Firm Official Pat Damm Date 1-29-99and
Supervisor or Operator _____ Date _____

(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

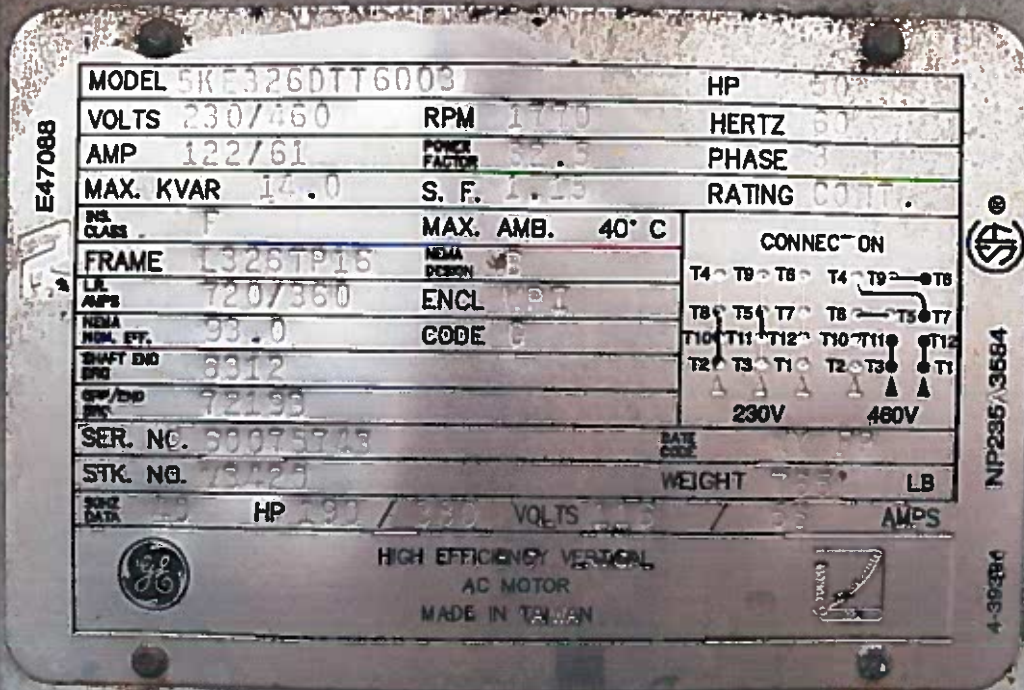


67-15094 POD

44d 35.106
-116d 35.680

D0000425

Pump and motor discharges into 6" steel pipe. McCrometer measuring device shown above T point. Pipe running across well water is surface water supply line.



GE Motor tag

Model:
5KE326DTT6003
HP: 50
Phase: 3
Serial: 60075743



Worthington Vertical
Pump Corp tag

SN: VTP-54317

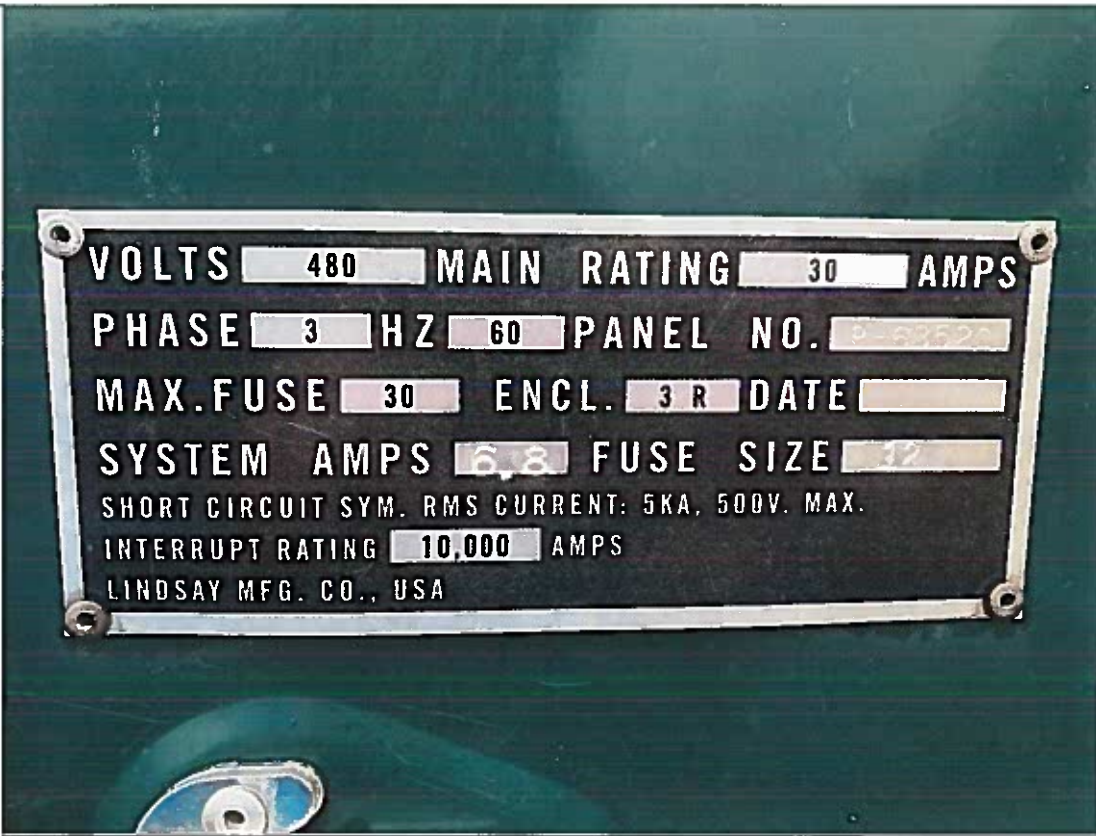






POU

34 acres of alfalfa
grown under pivot.



Pivot box plate

WISHRW-15810

PRECIPITATION CHART

JANUARY 02, 2007

DEALER - AGRI LINES IRRIGATION

IRRIGATOR - LACEY

TOTAL LENGTH PIPE = 719.47
 GPM UNDER PIPE = 281.71
 ACRES UNDER PIPE = 37.33
 RANGE OF ENDGUN = 113.61
 GPM OF ENDGUN = 98.48
 ACRES UNDER ENDGUN = 12.72
 WATERING LENGTH = 833.08

SYSTEM PRESSURE = 60 PSI
 TOTAL GPM = 350.19

MOTOR SIZE (HP) = 3/4
 LOADED MOTOR RPM = 1750
 CENTER GEAR BOX RATIO = 40
 WHEEL GEAR BOX RATIO = 50
 TIRE SIZE = 14.9 X 24
 LAST TOWER SPEED (FPM) = 10.20

PRECIPITATION DATA FIGURED WITH ENDGUN RUNNING

PRECIPITATION BASED			1/2 TIMER BASED		
PRECIPITATION INCHES	1/2 TIMER SETTING	TIME HOURS	1/2 TIMER SETTING	PRECIPITATION INCHES	TIME HOURS
.10	100.00	6.93 - 416 min	100.00	.10	6.93 - 416 min
.20	51.62	13.42	90.00	.11	7.70
.25	41.30	16.78	80.00	.13	8.66
.30	34.41	20.14	70.00	.15	9.90
.40	25.81	26.85	60.00	.17	11.55
.50	20.65	33.56	50.00	.21	13.86
.60	17.21	40.27	45.00	.23	15.40
.70	14.75	46.99	40.00	.26	17.33
.75	13.77	50.34	35.00	.29	19.88
.80	12.91	53.70	30.00	.34	23.10
.90	11.47	60.41	25.00	.41	27.72
1.00	10.32	67.12	20.00	.52	34.65
1.25	8.26	83.91	15.00	.69	46.20
1.50	6.88	100.69	10.00	1.03	69.30
1.75	5.90	117.47	5.00	2.06	138.60

CAUTION: The relationship between precipitation rate, timer setting, and hours per revolution provided above are theoretical numbers based on the data list at the top of the page. Actual precipitation rates may vary due to the following field and machine conditions: wind drift; evaporation; tire slippage, tire loaded radius; drive train efficiency; elevation changes; soil type. Due to these varying field and machine conditions the above chart should be used as a guide only.

Precipitation Chart
 found inside pivot box.



State of Idaho

DEPARTMENT OF WATER RESOURCES

Western Region • 2735 Airport Way • Boise, Idaho 83705-5082

Phone: (208) 334-2190 • Fax: (208) 334-2348 • Website: www.idwr.idaho.gov

C.L. "BUTCIE" OTTER
Governor

GARY SPACKMAN
Director

April 19, 2017

COPY

LACEY RANCH
3167 GOODRICH RD
CAMBRIDGE ID 83610

RE: Scheduling Field Exam for Water Right Permit No. 67-15094

Dear Permit Holder:

We are planning to conduct water right examinations in the vicinity of the above-referenced permit **this season**. An examination is needed to verify the water use in order to issue a water right license.

The above-referenced permit authorizes **0.70 cfs of GROUND WATER** for **IRRIGATION** use. **If you have developed a beneficial use and still own the place of use property, please contact me at your earliest convenience to schedule an examination.**

If you did not develop a beneficial use of water under the permit during the beneficial use period, a license cannot be issued and the permit should be relinquished. If that use was developed, but have ceased using the water and you currently carry no interest in it, please relinquish the permit by submitting the enclosed Relinquishment of Permit form (no fee required).

If you did develop a beneficial use of water under the permit, but you no longer own the place of use property identified in the permit, please submit the enclosed Assignment of Permit form with the applicable \$25 processing fee.

Please contact me within the next thirty (30) days at (208) 334-2190 to either schedule an examination or submit a relinquishment or assignment form. If you no longer own the place of use property and/or do not respond to this letter, the department will work with the current property owner to issue a license or void the permit.

Sincerely,

Patrick Kelly
Water Resource Agent, Sr.

Enclosures: Relinquishment of Permit form
Assignment of Permit form
Water Permit Report and Map