

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 67-07141
Exam Date: 11/8/2017

1. Current Owner:
MARY DENYSE FIELD 1025 LOWER CRANE CREEK RD WEISER ID 83672 (208) 549-0198 And
JOHN ERSKINE FIELD 1025 LOWER CRANE CREEK RD WEISER ID 83672 (208) 549-0198
2. Accompanied by: Current Owners
Phone No:
Address:
Relationship to Permit Holder:

3. **SOURCE:**
GROUND WATER

TRIBUTARY:

B. OVERLAP REVIEW

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

C. DIVERSION AND DELIVERY SYSTEM1. **LOCATION OF POINT(S) OF DIVERSION:**

GROUND WATER NE¼SE¼ Sec. 24, Twp 11N, Rge 04W, B.M. WASHINGTON County

Method of Determination: Well GPS point collected at 44d 16.390, -116d 45.156. This point lies within the above legal description according to digital PLSS 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	
11N	03W	19							2.0 L 2										2.0
11N	04W	24	2.0	31.0	10.0	31.0	5.0								2.0				81.0

Total Acres: 83

Method of Determination: 1981 NHAP satellite imagery was used to measure beneficial use during the development period. The irrigation use totaled 83 acres within the above legal description according to ArcMap tools.

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 or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
12" Irr Well	GE	50	ENJ511340		

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

THIS WELL INFORMATION REPRESENTS MOTOR
INSTALLED AT TIME OF FIELD EXAM.

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date

2. Measurements: Power to well not on at time of exam. No measurement taken.

E. FLOW CALCULATIONS☒ Additional Computation Sheets Attached

Measured Method:

$$Q = \frac{8.8 * (\text{Efficiency}) * \text{hp}}{\text{depth to water} + 2.31 * (\text{psi}) + \text{friction}}$$

See attached theoretical sheet for multiple scenarios.

Permit	2.00 cfs
B.U. Standard Allowance	1.66 cfs
B. U. Proof Fee	\$100 → 0.21 to 1.00 cfs
1977 pump test of system	0.88 cfs
License Recommendation	0.88 cfs

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 83 * 4.5 = 373.5 \text{ af}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.88 * 260 * 1.9835 = 453.3$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = \mathbf{373.5 \text{ af}}$$

2. Volume Calculations for Other Uses: Stockwater use not recommended.

G. NARRATIVE/REMARKS/COMMENTS

The field exam was completed on 11/8/2017 by agent Patrick Kelly. I was accompanied by the current owners as well as Jerome, and interested buyer of the property. The property was purchased by the Fields from Kenneth Skow in 2011. A recommendation for irrigation totaling 0.88 cfs 373.5 af on 83 acres. The stockwater use is dropped from the permit since the users did not own stock, and evidence of any historical stockwater use was not found.

The permit was issued in 1973 and since that time the pump and motor have been replaced. At the time of the exam, the well was equipped with a 50 hp GE motor. Power was not on at the time of the exam to test the system today. However a pump curve and test of the system during the beneficial use period in 1977 was provided. This test (attached to this report) shows a maximum efficiency of 375 – 400 gallons per minute. The pump test receipt shows a 40 hp, 3 phase motor was installed. Pumping conditions showed a 12" well depth of 300'. With the pump set at 235', the well produced 395 gpm or 0.88 cfs. At another 115' (top riser on system?) the well produced 330 gpm or 0.74 cfs. A theoretical calculation is attached to this report with various scenarios but carries an average diversion rate of 0.55 cfs.

The permit was issued for 2.00 cfs on 160 acres but the proof was submitted claiming a rate of 1.00 cfs on 90 acres. It is believed that Mr. Skow knew the well produced closer to what was measured during the pump test. Without being able to actual measure the system, the best available rate I can suggest with the evidence presented is 0.88 cfs. Additionally, Mr. Skow evidently utilized the irrigation pond near the well site. So the 395 gpm may represent a good number close to what he was actually using on a minimal lift, open discharge to pond system.

A 1981 satellite image was used to measure beneficial use totaling 83 acres. This closely represents the number indicated on the proof of beneficial use form. A licensing amendment was received to correct the legal description.

The irrigation pond is located within a very short distance of the well. The 0.88 cfs diversion rate can fill the capacity of this pond in 24 hours, so diversion to storage or irrigation storage is not required. At the time of the exam, the irrigation system is piped directly to the risers and the storage pond is no longer used for irrigation. The pond has since been applied for as wildlife storage under permit 67-15178.

The licensing amendment was sent to the permit owner to correct the POU prior to completing a full analysis of the file. Since then the diversion rate recommendation is being lessened from 1.66 cfs, to 0.88 cfs.

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

- The permit was issued with a condition requiring a measuring device installed on the system. In 1978, an order was issued to modify the condition to install an "access port". The discharge pipe of the system from the well is exposed for an extended number of feet that would provide an excellent measuring location with a panametrics unit, should the need arise.

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 11/15	0.88 CFS	373.5 AF
<u>Totals:</u>		0.88 CFS	373.5 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 12-8-2017

Reviewer _____ Date _____

67-7141

04W

03W

11N

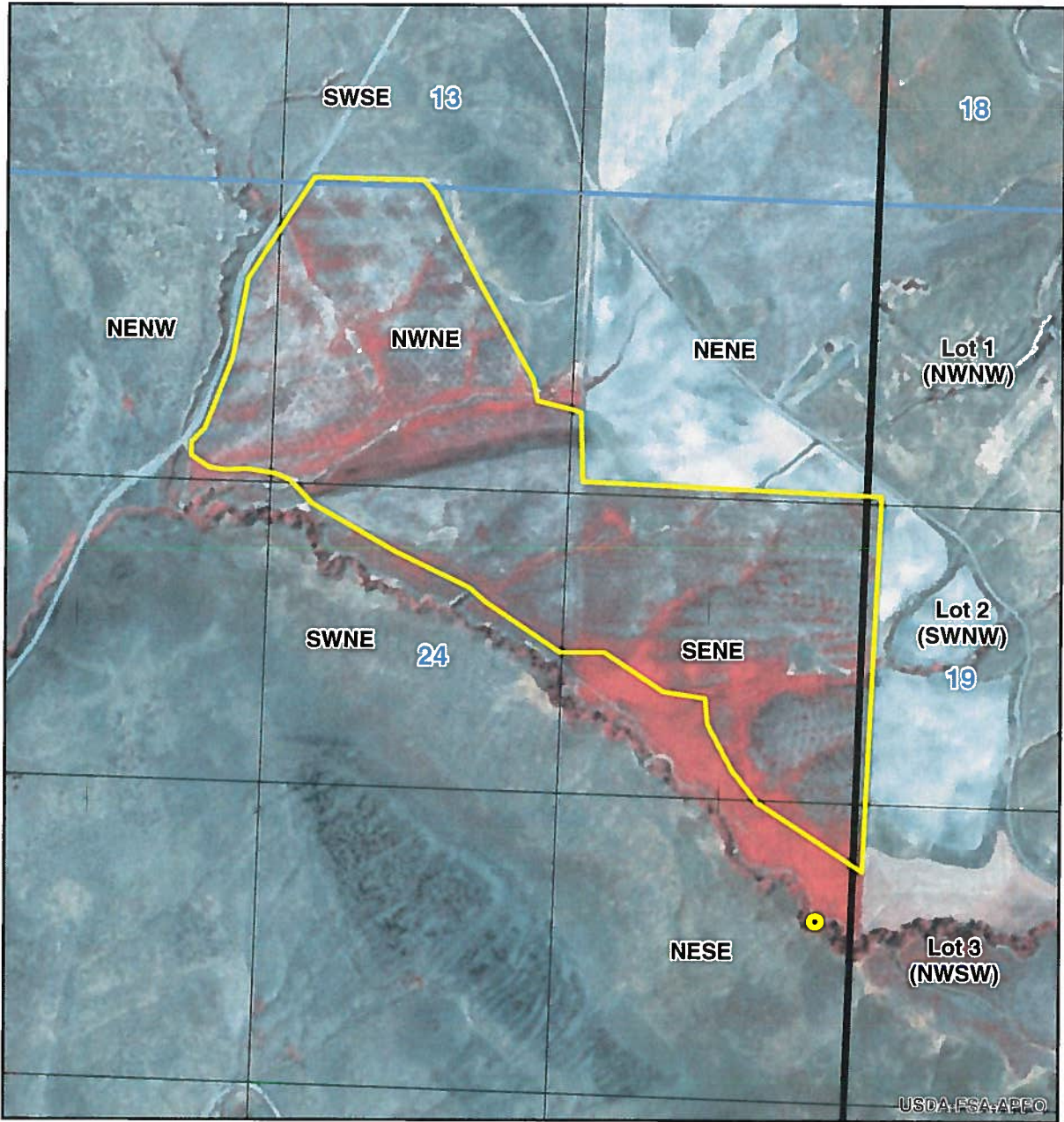
11N

11N

11N

04W

03W



USDA-FSA-APEO

0 0.075 0.15 0.3 Miles



Point of Diversion



Place Of Use Boundary



Townships



PLS Sections



THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 67-7141
 Reviewer: Patrick Kelly
 Date of Review: 12/8/2017

P/D No.:	Scenario 1	Scenario 2	Scenario 3
PUMP HORSEPOWER	40	40	40
BOOSTER HORSEPOWER	0	0	0
PUMPING LEVEL	240	240	240
DISCHARGE PRESSURE	10	15	20
RATE OF FLOW (cfs)	0.94	0.90	0.86 0.90

The above calculates the formula =

$$Q = \frac{8.8 * (\text{Efficiency}) * \text{hp}}{\text{depth to water} + 2.31 * (\text{psi}) + \text{friction}}$$

Assumptions: %70 efficiency.
 No Friction

Examiners Notes:

See narrative of field exam report.

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources, within 30 days after the completion or abandonment of the well.

1. WELL OWNER Name <u>Kenneth Skow</u> Address <u>Lower Crane Wier Id</u> Owner's Permit No. <u>67 7149</u>		7. WATER LEVEL Static water level <u>17</u> feet below land surface Flowing? ☐ Yes ☒ No G.P.M. flow _____ Temperature <u>55</u> ° F. Quality <u>Good</u> Artesian closed-in pressure _____ p.s.i. Controlled by ☐ Valve ☐ Cap ☐ Plug																																																																	
2. NATURE OF WORK ☒ New well ☐ Deepened ☐ Replacement ☐ Abandoned (Describe method of abandoning) _____		8. WELL TEST DATA ☒ Pump ☐ Roller ☐ Other Discharge G.P.M. <u>450</u> Draw Down <u>100</u> Hours Pumped <u>100</u>																																																																	
3. PROPOSED USE ☐ Domestic ☒ Irrigation ☐ Test ☐ Other (specify type) _____ ☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection		9. LITHOLOGIC LOG																																																																	
4. METHOD DRILLED ☒ Cable ☐ Rotary ☐ Dug ☐ Other		<table border="1"><thead><tr><th rowspan="2">Hole Elev.</th><th colspan="2">Depth</th><th rowspan="2">Material</th><th colspan="2">Water</th></tr><tr><th>From</th><th>To</th><th>Yes</th><th>No</th></tr></thead><tbody><tr><td>12</td><td>0</td><td>17</td><td>Clay</td><td></td><td></td></tr><tr><td>12</td><td>17</td><td>20</td><td>Sand</td><td></td><td></td></tr><tr><td>12</td><td>20</td><td>44</td><td>Blue Clay</td><td></td><td></td></tr><tr><td>12</td><td>44</td><td>54</td><td>Broken Basalt</td><td></td><td></td></tr><tr><td>12</td><td>54</td><td>77</td><td>Blue Shale</td><td></td><td></td></tr><tr><td>12</td><td>77</td><td>88</td><td>Sand Stone</td><td></td><td></td></tr><tr><td>12</td><td>88</td><td>265</td><td>Blue Shale</td><td></td><td></td></tr><tr><td>12</td><td>265</td><td>296</td><td>Broken Basalt</td><td></td><td></td></tr><tr><td>12</td><td>296</td><td>300</td><td>green Shale</td><td></td><td></td></tr></tbody></table>		Hole Elev.	Depth		Material	Water		From	To	Yes	No	12	0	17	Clay			12	17	20	Sand			12	20	44	Blue Clay			12	44	54	Broken Basalt			12	54	77	Blue Shale			12	77	88	Sand Stone			12	88	265	Blue Shale			12	265	296	Broken Basalt			12	296	300	green Shale		
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5. WELL CONSTRUCTION Diameter of hole <u>12</u> inches Total depth <u>300</u> feet Casing schedule: ☐ Steel ☐ Concrete Thickness <u>250</u> inches Diameter <u>12</u> inches From <u>0</u> feet To <u>90</u> feet _____ inches _____ inches _____ feet _____ feet _____ inches _____ inches _____ feet _____ feet _____ inches _____ inches _____ feet _____ feet _____ inches _____ inches _____ feet _____ feet Was casing drive shoe used? ☐ Yes ☒ No Was a packer or seal used? ☐ Yes ☒ No Perforated? ☐ Yes ☒ No How perforated? ☒ Factory ☐ Knife ☐ Torch Size of perforation _____ inches by _____ inches Number _____ From _____ To _____ _____ perforations _____ feet _____ feet _____ perforations _____ feet _____ feet _____ perforations _____ feet _____ feet Well screen installed? ☐ Yes ☒ No Manufacturer's name _____ Type _____ Model No. _____ Diameter _____ Slot size _____ Set from _____ feet to _____ feet Diameter _____ Slot size _____ Set from _____ feet to _____ feet Gravel packed? ☐ Yes ☒ No Size of gravel _____ Placed from _____ feet to _____ feet Surface seal depth <u>18</u> Material used in seal: ☐ Cement grout ☒ Puddling clay ☐ Well cuttings Sealing procedure used ☒ Sherry pit ☐ Temporary surface casing ☒ Overbore to seal depth		10. Work started <u>Sept 3, 77</u> finished <u>Oct 1, 77</u>																																																																	
6. LOCATION OF WELL Sketch map location must agree with written location <u>Lower Crane Area</u> Subdivision Name _____ Lot No. _____ Block No. _____ County <u>Washington</u> _____ N _____ S _____ E/W _____ % _____ % Sec. _____ T. _____ N/S, R. _____ E/W		11. DRILLER'S CERTIFICATION Firm Name <u>Frank's Drilling</u> Firm No. <u>326</u> Address <u>RT 1 Box 114</u> Date <u>Sept 17</u> Signed by (Firm Official) _____ and _____ (Operator)																																																																	

USE ADDITIONAL SHEETS IF NECESSARY

FORWARD THE WHITE COPY TO THE DEPARTMENT

MICROFILMED

APR 18 2006

(well drilled to 500'
after this per Mr. Skow)
4/5/2000

P.O. BOX 1005
NAMP, IDAHO 83651
(208) 466-7376

NORMAN D. "BILL" WEBB
MANAGER

YNE PUMPS, Inc.

P.O. BOX 1005
NAMP, IDAHO 83651
(208) 466-7376

TING REPORT AND AGREEMENT

CUSTOMER NAME.

LOCATION

DATE 10-11-77.

DRILLER.

WELL ID.

WELL DEPTH

-STATIC LEVEL

AMOUNT OF CASING.

AMOUNT OF SCREEN.

PUMP SETTING

BOWL SIZE

DISCHARGE SIZE

ORIFICE SIZE.

[illegible]

TESTED BY

APPROVED BY

HRS. TESTED



LAYNE OF IDAHO, INC.
BOX 1005 NAMPA, IDAHO 83651

PUMP ESTIMATE AND ORDER

DATE 10-13-77

CUSTOMER

BOX 1005, NAMPA IDAHO 83651 (208) 466-7378

ROUTE _____ DATE DESIRED _____

PUMPING CONDITIONS

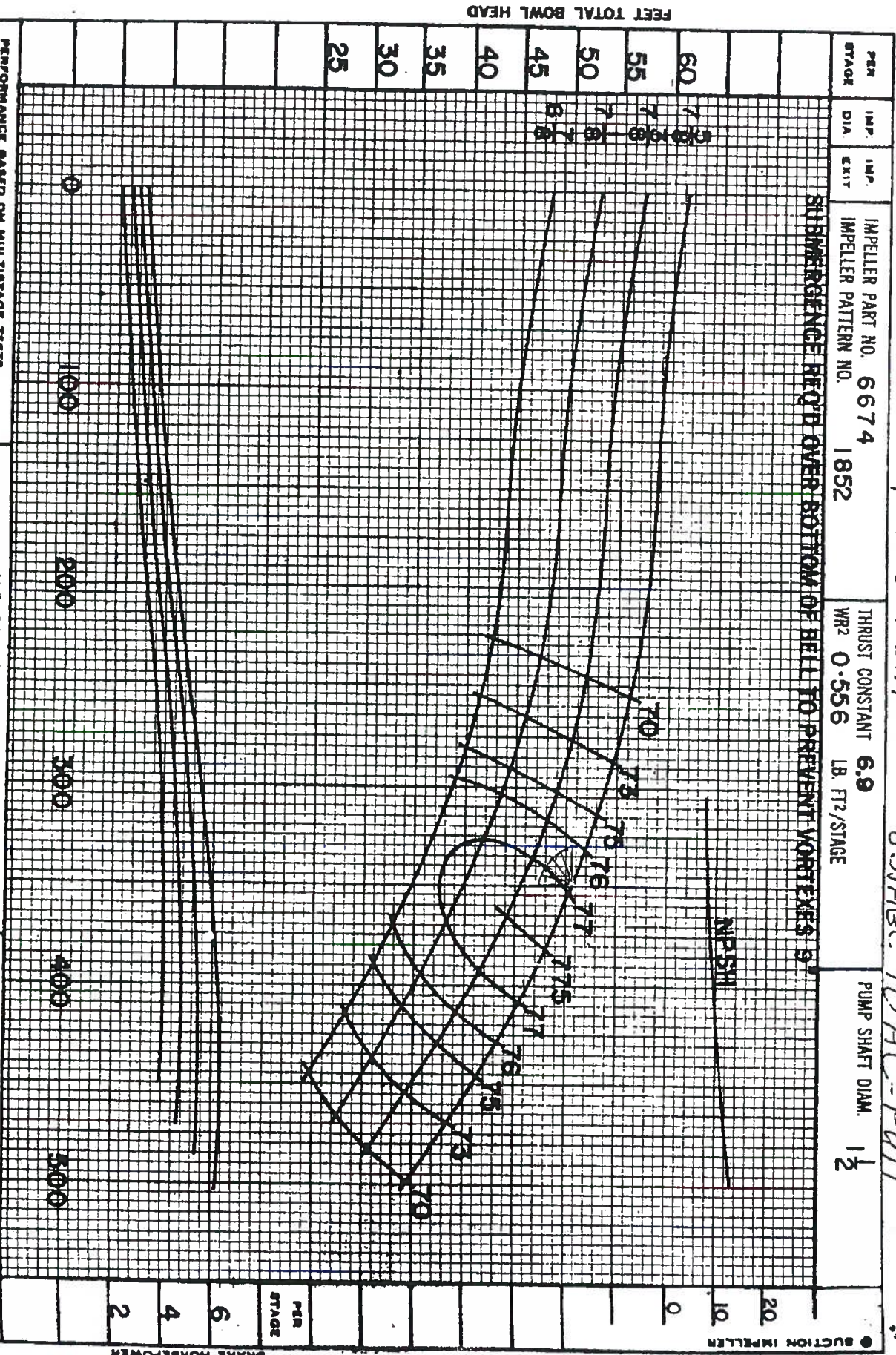
INSIDE DIA. OF WELL 12"
DEPTH OF WELL 300'
STATIC WATER LEVEL 16'
DRAWDOWN _____

LIFT IN WELL _____
LIFT ABOVE 115 LBS. 265'
COLUMN FRICTION _____ 3
TOTAL DYNN. HEAD 400'

CAPACITY 325 GPM
SPEED OF PUMP 1760 RPM
HP REQUIRED 43 BHP
ALLOWABLE SHAFT HP _____

1 (we) certify to have the authority to make this purchase for the buyer and acknowledge and agree to the maximum legal rate of interest to be assessed on any unpaid amounts after (30) thirty days from date of invoice, and that said charges on payment of interest does not provide for automatic deferred payments, and hereby instructs LAYNE OF IDAHO, INC. an independent contractor, to proceed with the work described with the understanding that they are not to be held liable for any damage in any way whatsoever for failure to complete the work mentioned, nor for any injury or damage resulting from their effort to perform such work, or for any delay on their part in completing same. Contractor shall carry its own Workmen's Compensation, public liability and property damage insurance.

8 STAGE: 10 AC = Full



PERFORMANCE BASED ON MULTISTAGE TESTS
PUMPING CLEAR COLD WATER @ 1.0
FOR 1 STAGE MULTIPLY HEAD & EFF. BY
FOR 2 STAGES MULTIPLY HD. & EFF. BY

95	98
----	----

DATE 10-25-72

U S GALLONS PER MINUTE

Johnston Pump Company
Glendora, California 91740

ESTABLISHED 1909

IOAC II TURBINE PUMP

1760 RRM

BOWL — CAST IRON
VIT. EN.
CURRY SHEET NO.

EC - 0541



Well and power box

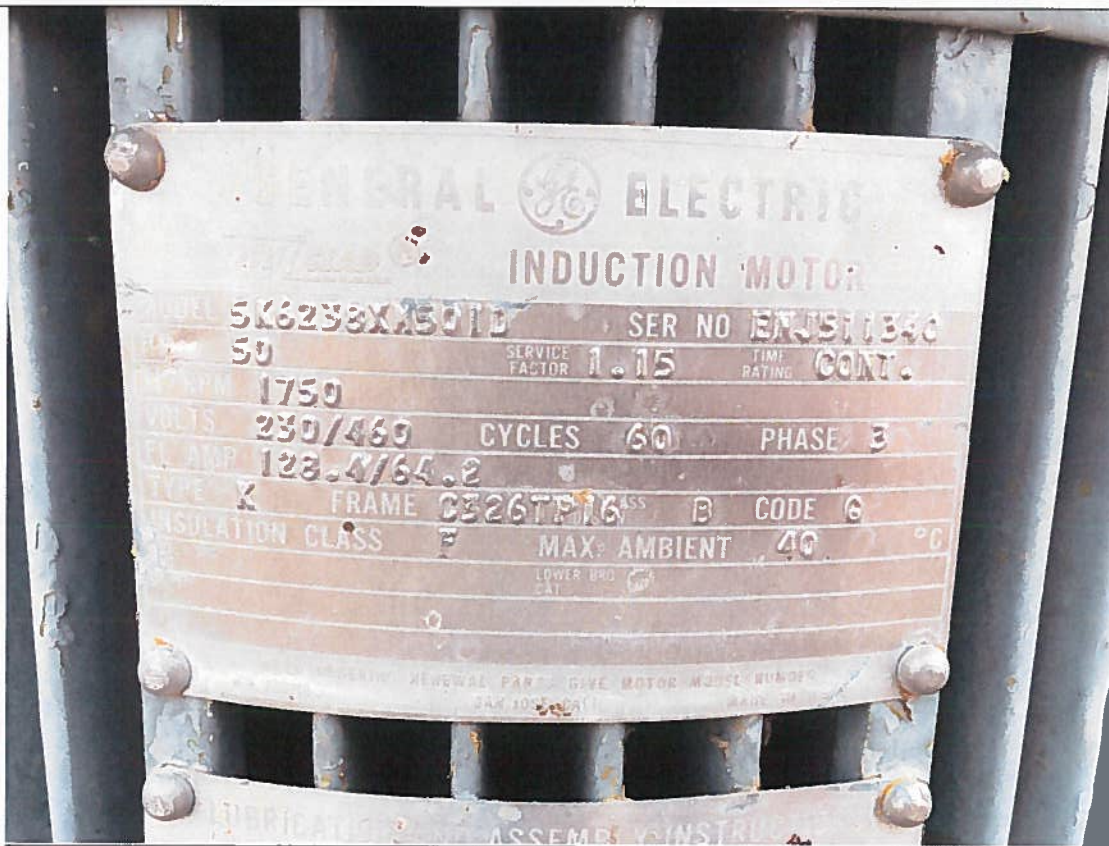


Well diverts water through a 10" mainline to risers for hand line sprinkler system.



POD:

44d 13.390
-116d 45.156



GE Motor Plate

This represent what is in place at the time of the exam, not what was used during the beneficial use period.



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. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

November 09, 2017

COPY

MARY DENYSE FIELD
JOHN ERSKINE FIELD
1025 LOWER CRANE CREEK RD
WEISER ID 83672

RE: Water Right Permit No. 67-07141

Dear Permit Holder(s):

The Department of Water Resources is reviewing the permit(s) referenced above prior to issuing water right license(s). By issuing a license, the Department confirms the extent of development that has been established in compliance with the terms of the permit.

The examiner who verified your water use reported that certain elements of the permit(s) have been developed differently than described on your permit(s). Changes that do not increase the authorized use of water under the permit(s) can be requested and approved in accordance with Section 42-211, Idaho Code. Before license(s) can be issued, your permit(s) must be amended to depict your water use as it was actually developed.

Based on the examiner's report, the following elements were developed differently than described on your permit(s):

_____ **Point(s) of Diversion**

☒ **Place(s) of Use**

_____ **Other**

The enclosed Application for Amendment form(s) depicts the elements of the water right(s) as they will appear on the license(s) when issued. Please review the amendment form(s) carefully. If you concur with the information presented, please sign and return the form(s) with the \$100.00 filing fee within 14 days.

If you have any questions, please call me at 208-334-2190.

Sincerely,

Patrick Kelly
Water Resource Agent, Sr.

Enclosure(s): Application for Amendment



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. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

April 19, 2017

COPY

JOHN AND MARY FIELD
1025 LOWER CRANE CREEK RD
WEISER ID 83672

RE: Scheduling Field Exam for Water Right Permit No. 67-7141

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 **2.00 cfs of GROUND WATER for DIVERSION TO STORAGE, IRRIGATION, IRRIGATION STORAGE, and STOCKWATER 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