

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-11542
Exam Date: 6/16/2016

1. Current Owner:
BEAN ROAD WATER ASSN 3510 W BEAN AVE HAYDEN ID 83835 (208) 772-5811
2. Accompanied by: Craig Frei
Relationship to Permit Holder: Designated agent
3. **SOURCE:**
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: None

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

GROUND WATER NW¼SE¼ Sec. 21, Twp 51N, Rge 04W, B.M. KOOTENAI County

Method of Determination: Maps and GPS. POD location at 47° 45.008, 116° 50.161 (A0015438)

2.

PLACE OF USE: DOMESTIC

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
51N	04W	21													X	X			

PLACE OF USE: STOCKWATER

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
51N	04W	21													X	X			

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	
51N	04W	21													1.9	1.6			3.5

Total Acres: 3.5

Method of Determination: Google Earth and Arc map.

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
95-83-N-88	FRANKLIN	10	2366029020		

*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

2. Measurements: N/A

E. FLOW CALCULATIONSX Additional Computation Sheets Attached

Measured Method: UNABLE TO PERFORM FLOW MEASUREMENT BECAUSE WATER FROM WELL WAS DIVERTED DIRECTLY TO PRESSURE TANKS WITH NO PROPER SECTION OF PIPE FOR MEASUREMENT. THEORETICAL PUMPING EQUATION ESTIMATES FLOW RATE AT 0.15 CFS. SEE ATTACHED PUMPING EQUATION.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 3.5 \text{ AC} \times 3.0 \text{ AF} = 10.5 \text{ AF}$$

$$V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.10 \text{ CFS} \times 246 \times 1.9835 = 48.8 \text{ AF}$$

$$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} = 10.5 \text{ AF}$$

2. Volume Calculations for Other Uses:

$$\text{DOMESTIC USE FOR 5 HOMES} = 0.6 \text{ AF} \times 5 \text{ HOMES} = 3.0 \text{ AF}$$

$$\text{STOCKWATER FOR 30 HEAD OF STOCK} = 12 \text{ GPD} \times 30 \text{ STOCK} = 360 \text{ GPD} \times 365 \text{ DAYS} = 131,400 \text{ GPY}$$

$$131,400 \text{ GPY} / 325,850 \text{ GAL/AF} = 0.4 \text{ AF}$$

G. NARRATIVE/REMARKS/COMMENTS

Field exam with Craig Frei showed a well with 10hp pump. Well was located in a semi-underground pump house along with pressure tanks. Because of the way the piping was set up no measurement could be performed. Each house had its own pressure tanks and well provided water to those tanks and there was no proper area for measuring. Theoretical pumping equation estimates well can produce around 69 gpm or 0.15 cfs.

Well was serving 4 existing homes and 1 stubbed in lot. The stubbed in lot was located on a 19 acre piece of property that not been subdivided. There were two other stub-ins on the same property that they had applied for as domestic. Because the property was not subdivided, IDWR could only give credit for a stub-in for the 1 large lot.

The total irrigation for the 4 built homes was measured at 3.5 acres. An amendment will be sent because only 1 acre of irrigation was applied for in the NESE and 1.9 acres was found. Because the 4 built homes were irrigating more than ½ acre, the stub in cannot be given any irrigation. Applicant said the most stock they had on the properties was around 30 head of mixed stock.

License will be issued for domestic for 5 homes with a diversion rate of 0.11 cfs and an annual volume of 3.0 acre feet. Irrigation will be issued for 3.5 acres with a diversion rate of 0.10 cfs with an annual volume of 10.5 acre feet. Stockwater will be issued for 30 head of stock with a diversion rate of 0.02 cfs with an annual volume of 0.4 acre feet. Overall diversion rate cannot exceed 0.15 cfs with an overall annual volume of 13.9 acre feet.

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>
DOMESTIC	01/01 to 12/31	0.11 CFS	3.0 AF
IRRIGATION	03/15 to 11/15	0.10 CFS	10.5 AF
STOCKWATER	01/01 to 12/31	0.02 CFS	0.4 AF
<u>Totals:</u>		0.150 CFS	13.90 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

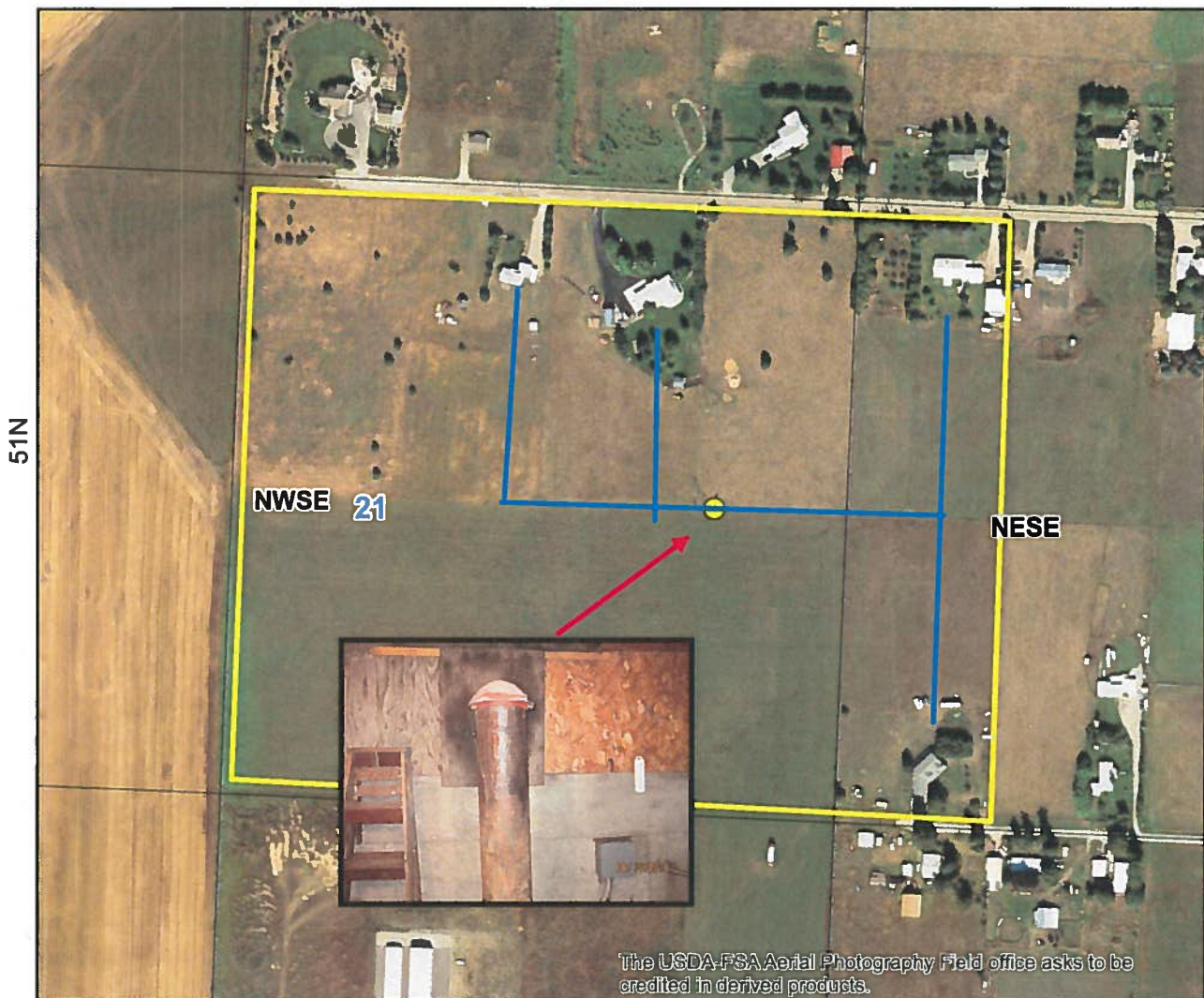
I. AUTHENTICATION

Field Examiner's Name Adam Fendrich Date 3-31-2017
 Reviewer Morgan Case Date 4/11/2017

State of Idaho
Department of Water Resources
Attachment to Field Exam
95-11542

SYSTEM DIAGRAM

04W



0 0.0475 0.095 0.19 Miles

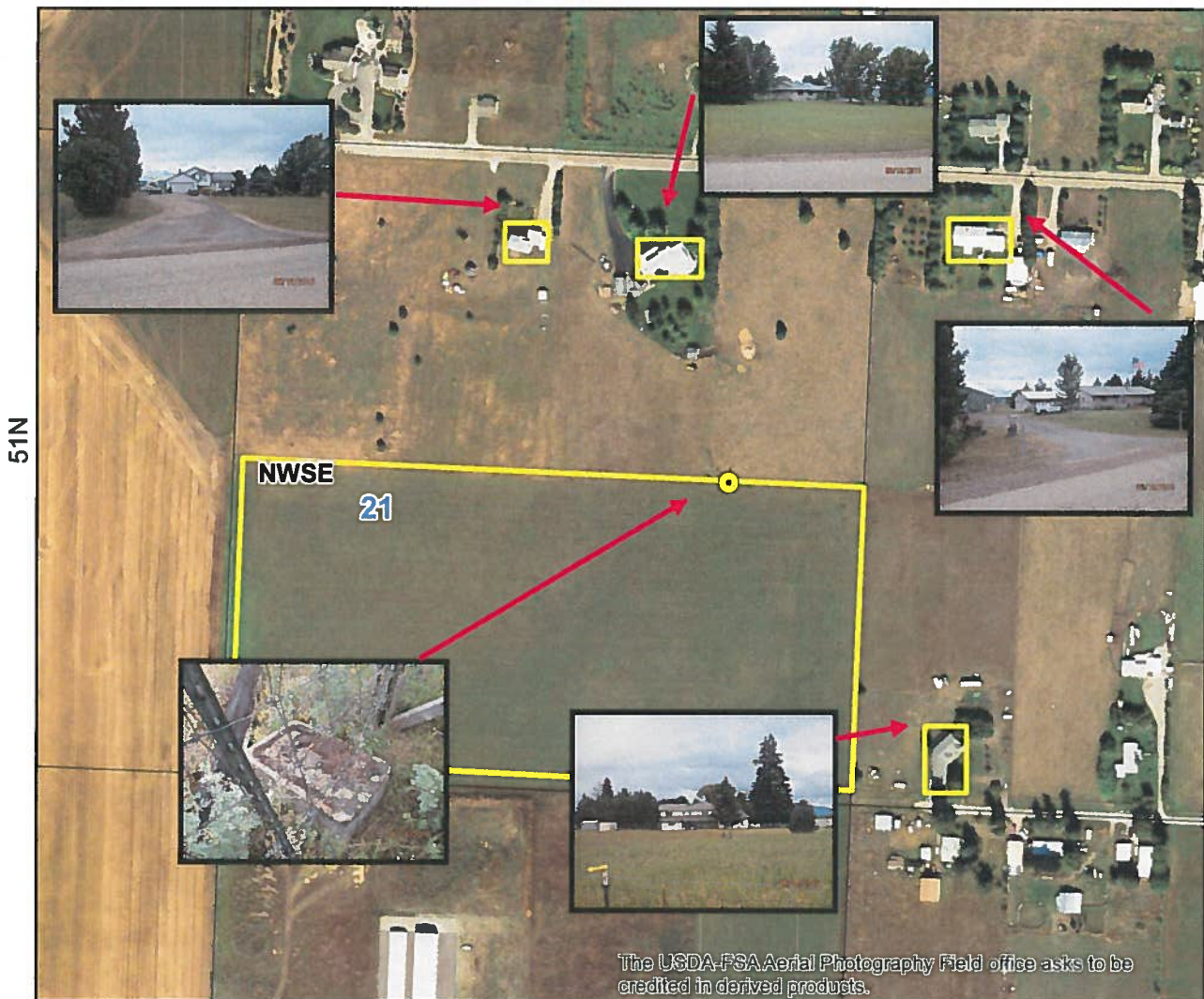
-  Point of Diversion
-  Place Of Use Boundary
-  Townships
-  PLS Sections



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DOMESTIC

04W



0 0.045 0.09 0.18 Miles

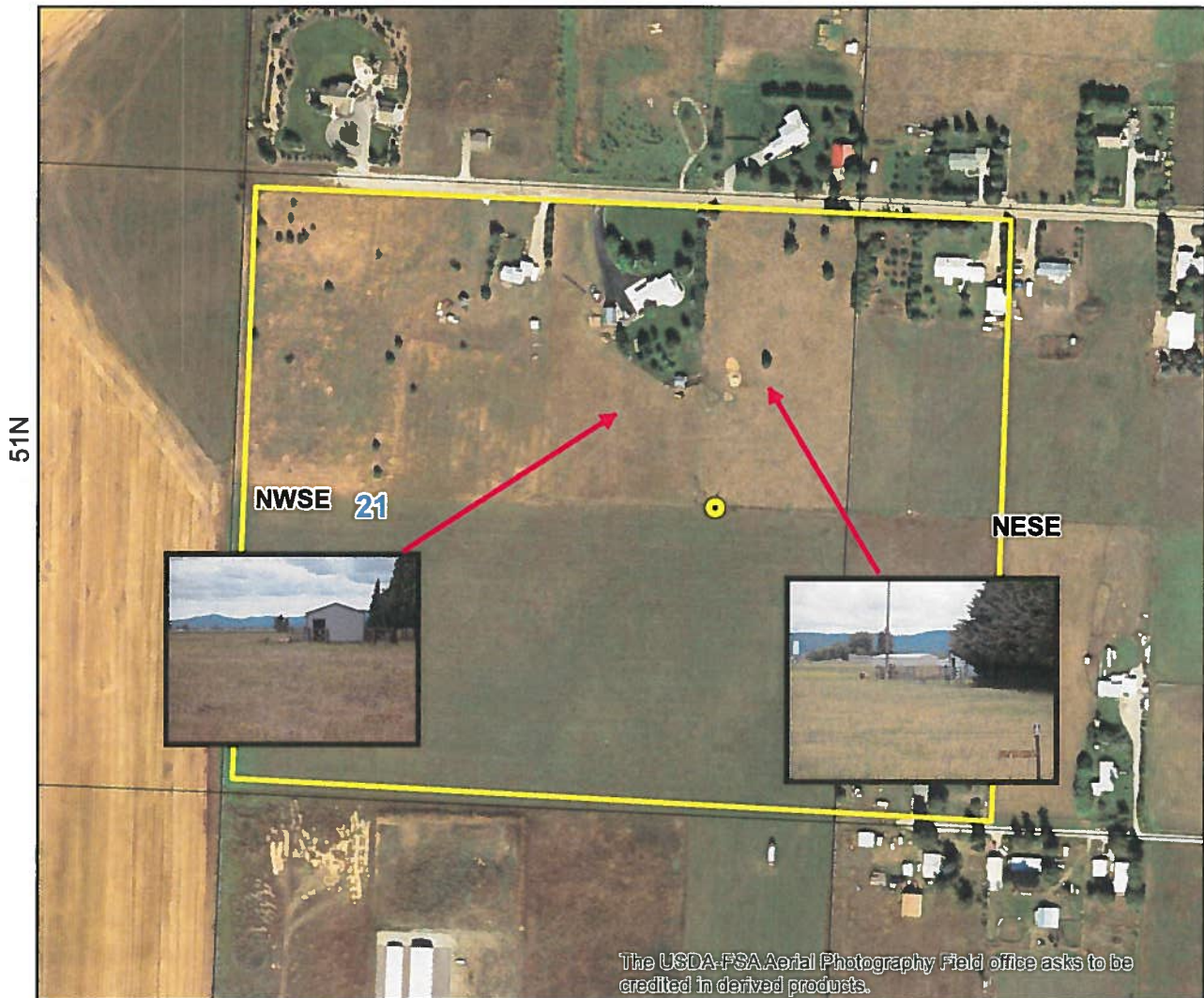
-  Point of Diversion
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STOCKWATER

04W



-  Point of Diversion
-  Place Of Use Boundary
-  Townships
-  PLS Sections

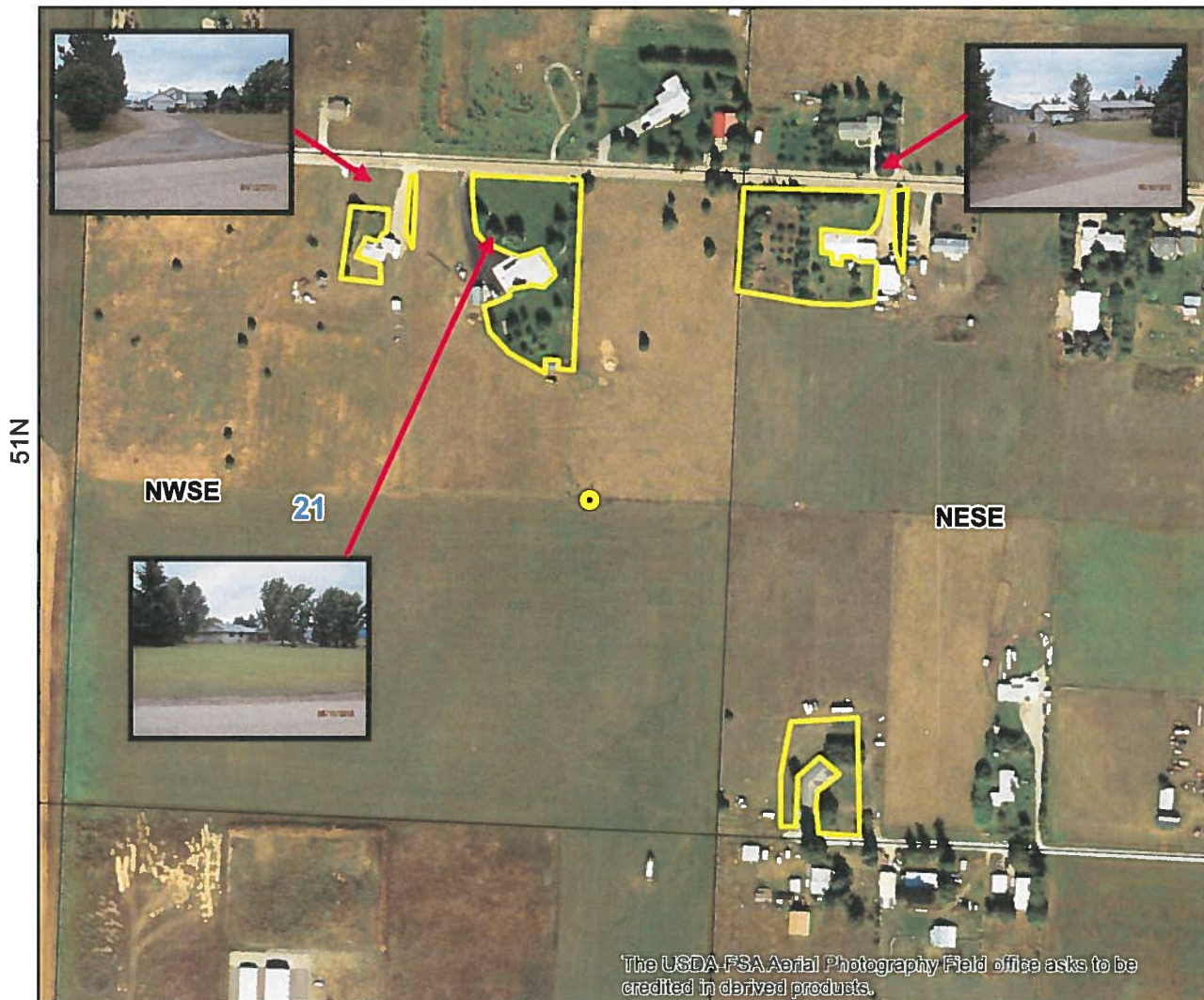
0 0.0475 0.095 0.19 Miles



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IRRIGATION

04W



0 0.045 0.09 0.18 Miles

- Point of Diversion
- Place Of Use Boundary
- Townships
- PLS Sections



THEORETICAL PUMPING EQUATION FOR WATER RIGHT 95-11542

WELL HAD A 10HP PUMP RUNNING AT 57 PSI. IDWR WILL ASSUME PUMP IS SET AROUND 325 FEET.

PUMP EQUATIONS WATER RIGHT No. 95-11542						
		HP	H in feet	Efficiency as a decimal	Pumping lift in feet	System pressure in PSI
Q =	HP*8.8*Eff/H	10	456.8367	0.8	325	57
Q = 0.154 cfs 69.3 gpm						



STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
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.

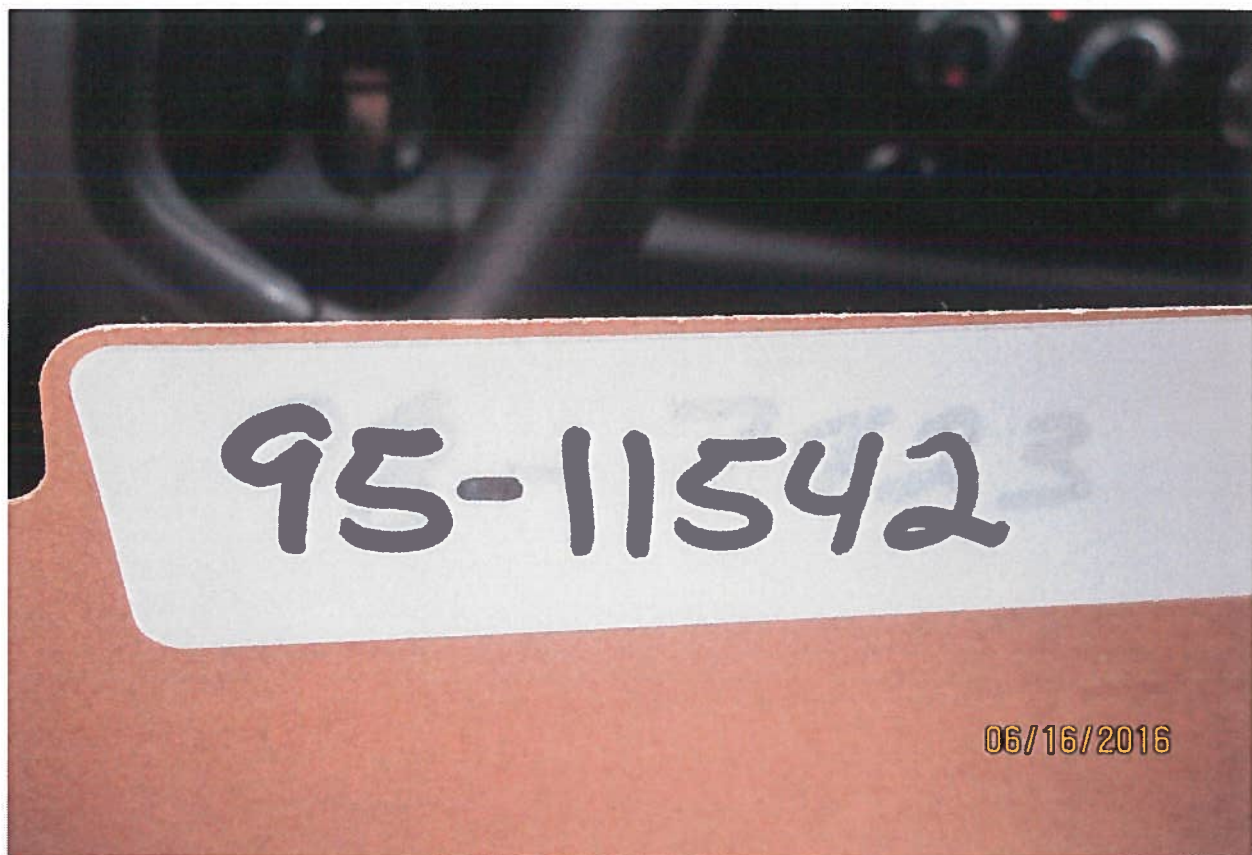
**USE TYPEWRITER OR
BALLPOINT PEN**

RECEIVED

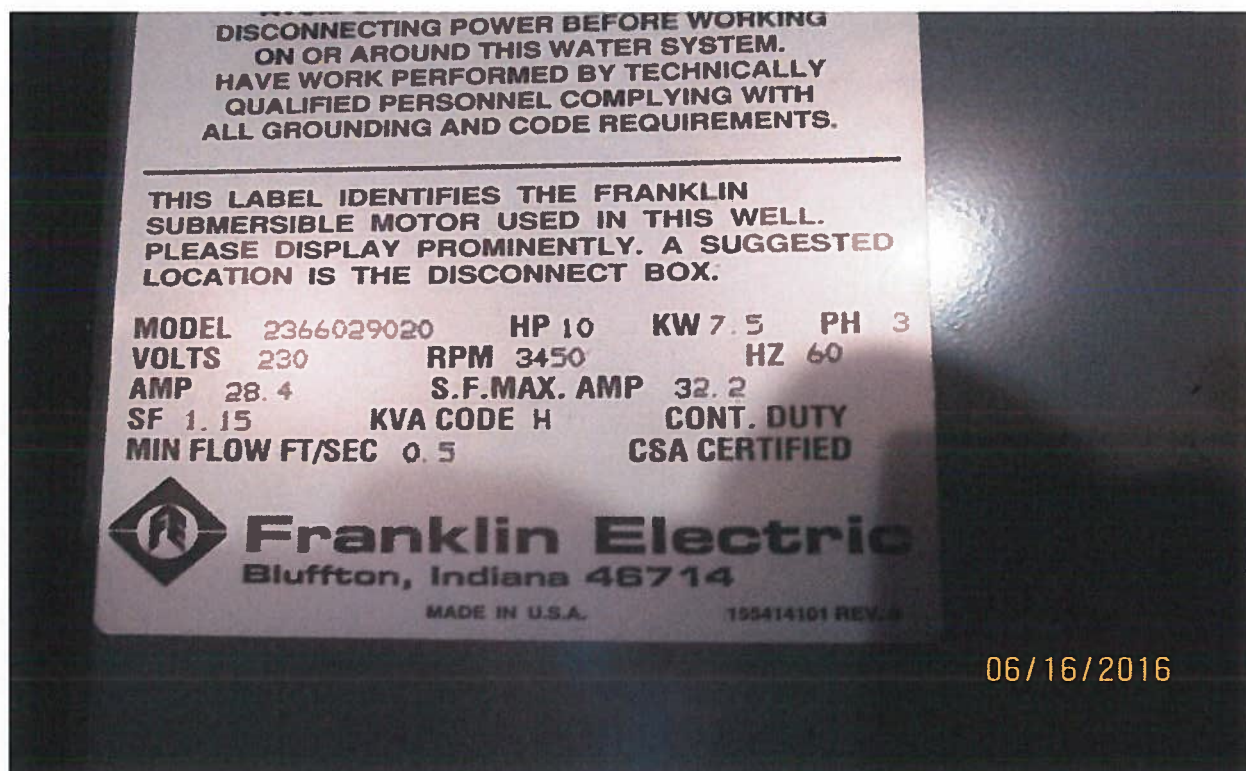
NOV 16 1983

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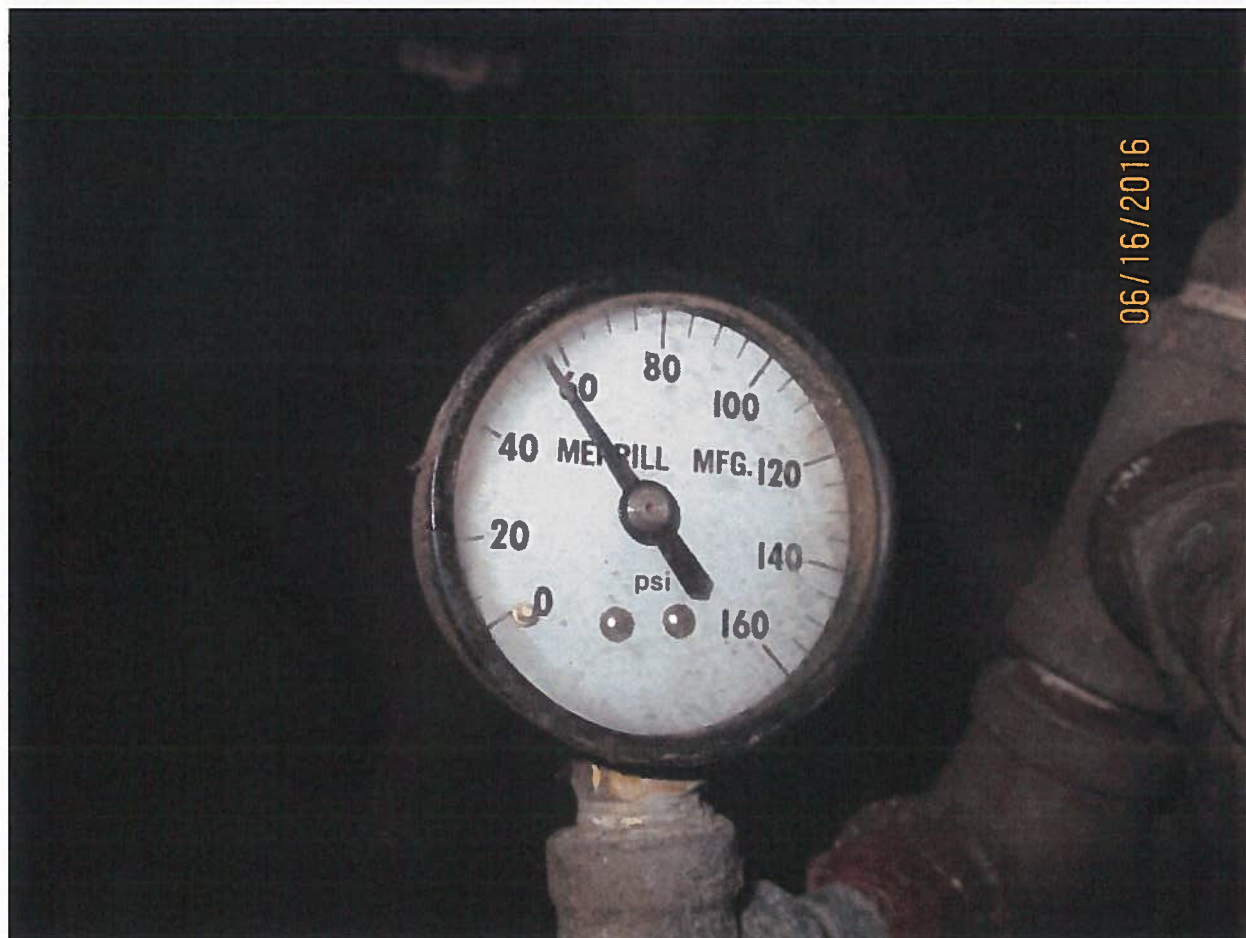
USE ADDITIONAL SHEETS IF NECESSARY - FORWARD THE WHITE COPY TO THE DEPARTMENT



Well with 10hp pump running at 60 psi. Given IDWR tag A0015438.



Information sticker for pump in well, 10hp pump.



System pressure at 60 psi.



Individual home pressure tanks adjacent to well.



Pump house.



Home 1 and irrigation, address is 3510 W Bean Ave.



Home 2 and irrigation, address is 3777 W Bean Ave.



Home 3 and irrigation, address is 3798 W Bean Ave.



Home 4, address is 3571 W Cranston Ave.



Stub-in for home on 19 acre lot.



Frost free hydrant for irrigation.



Stock.

