

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 36-08803

Exam Date: 5/24/2016

1. Current Owner:
JOHN C SOARES 3400 S 1700 E WENDELL ID 83355 (208)587-0658
2. Accompanied by: IDWR staff

3. SOURCE: GROUND WATER**B. OVERLAP REVIEW**

1. Other water rights with the same place of use: 36-7736
2. Other water rights with the same point-of-diversion: 36-7736

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

GROUND WATER L4 (SW¼SW¼) Sec. 19, Twp 08S, Rge 15E, B.M. GOODING County

Method of Determination: GPS point and aerial photography.

2.

PLACE OF USE: COMMERCIAL

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
08S	15E	19											X L 4						

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	
08S	15E	19											X L 4						

Method of Determination: Taxlot information and aerial photography.

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 ID No.*</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>
WMIS # 400156	Fairbanks	5	B6 220V		

*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:

A measurement is not required if the flow rate is less than 0.24 cfs according to the new beneficial use examination rules.

E. FLOW CALCULATIONS

Measured Method:



Additional Computation Sheets Attached

Using the horse power equation for a 5 HP pump at a depth of 140' and 40 PSI a flow rate of 0.13 cfs was calculated which is the permitted flow rate for 36-8803.

$$\frac{.7 \times 8.8 \times 5}{140 + (40 \times 2.31)} = \frac{30.8}{232.4} = 0.13 \text{ cfs}$$

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: N/A

$$V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$$

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

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

2. Volume Calculations for Other Uses: Based on pre-1987 development for 611 dairy cows and calculations from the dairy spreadsheet, I am recommending the volume of 22.4 AF for stockwater and 22.4 AF for commercial use for flexibility within the system. (see attached memo and spreadsheets.3/9/2001)

G. NARRATIVE/REMARKS/COMMENTS

Application for permit was filed on July 13, 2000 for the diversion of 0.13 cfs for uses associated with a dairy facility. The permit was approved on March 15, 2001 and proof was filed on March 21, 2001. Note though it is not typical, the permit was approved with a volume of 22.4 AF. The volume was based on a beneficial use determination for pre-1987 development for 611 dairy cows. The overlapping water right 36-7736 accounts for 200 cows and the new license will cover the remaining 411 cows. Allen Merritt's calculations from the dairy spreadsheet of 12.2 AF for stockwater and 10.2 AF for commercial use was determined for the permit with a combined total of 22.4 AF.(see attached memo.) **I am recommending a volume of 22.4 AF (12.2 AF + 10.2 AF = 22.4 AF) for both stock and commercial uses for flexibility within the dairy operation.**

The system consists of a well and a 5HP pump. The well serves one home and the dairy facility. The domestic use is covered by water right 36-7736. The stockwater and commercial uses for the dairy facility

will be covered by water right 36-7736 and this new license. **A condition limiting 36-7736 and the new license to 0.17 cfs and 30.3 AF is also recommended.**

A measurement is not required for permits with a flow rate less than 0.24 cfs. A theoretical horse power equation was calculated at 0.13 cfs for the approximate capacity of the well during the field exam for overlapping right 36-7736 and is also the maximum permitted rate. **Recommend a flow rate of 0.13 cfs for the new license.**

The measuring device requirement is currently waived by the Watermaster of Water District 130 but watermaster comments are still recommended.

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>
STOCKWATER	01/01 to 12/31	0.13 CFS	22.4 AF
COMMERCIAL	01/01 to 12/31	0.13 CFS	22.4 AF
<u>Totals:</u>		0.130 CFS	22.40 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

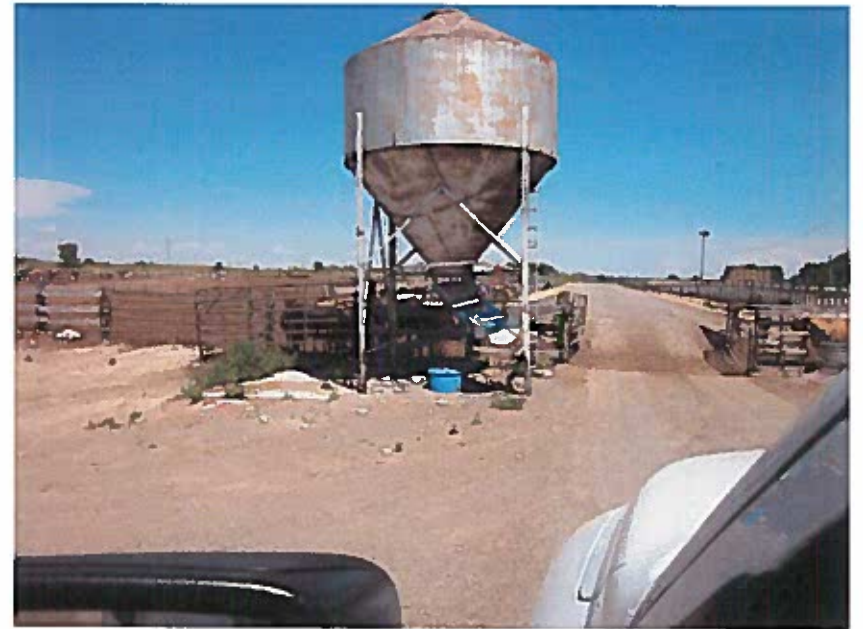
Sara Reeder

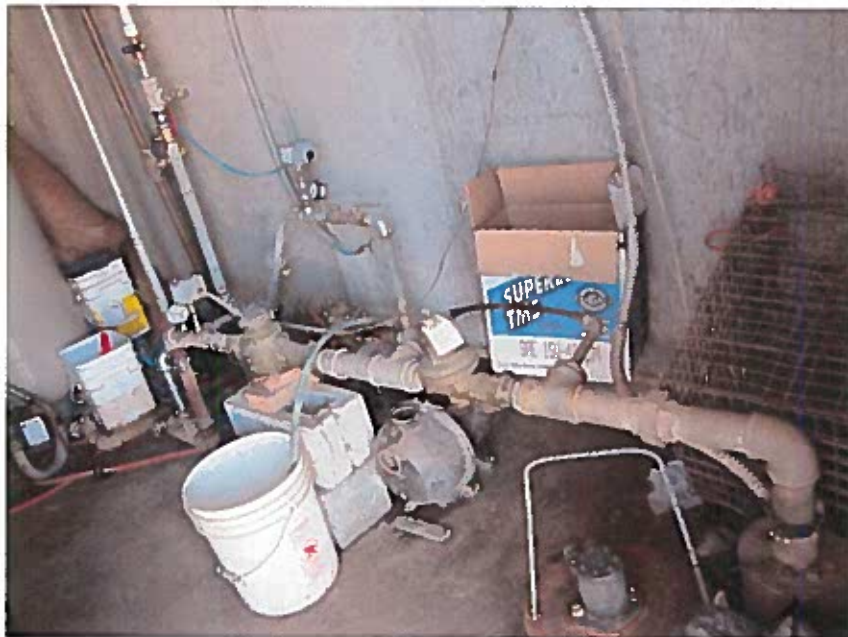
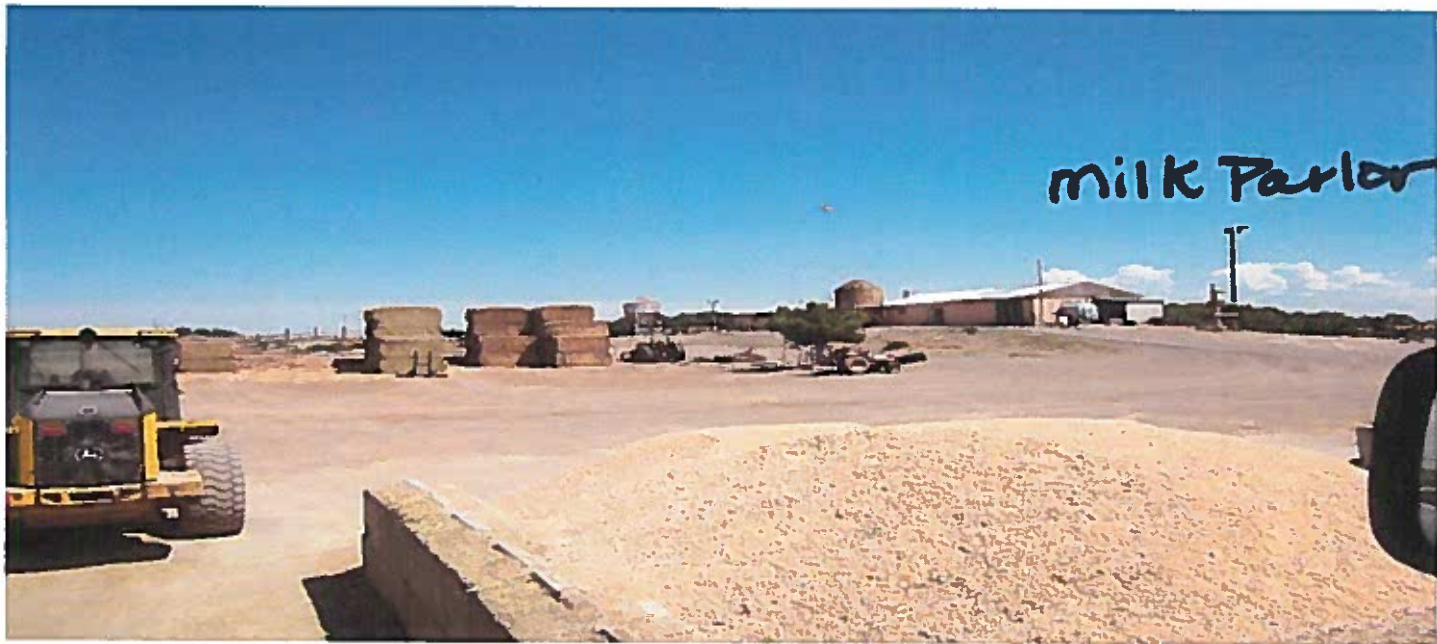
Date

6/14/16

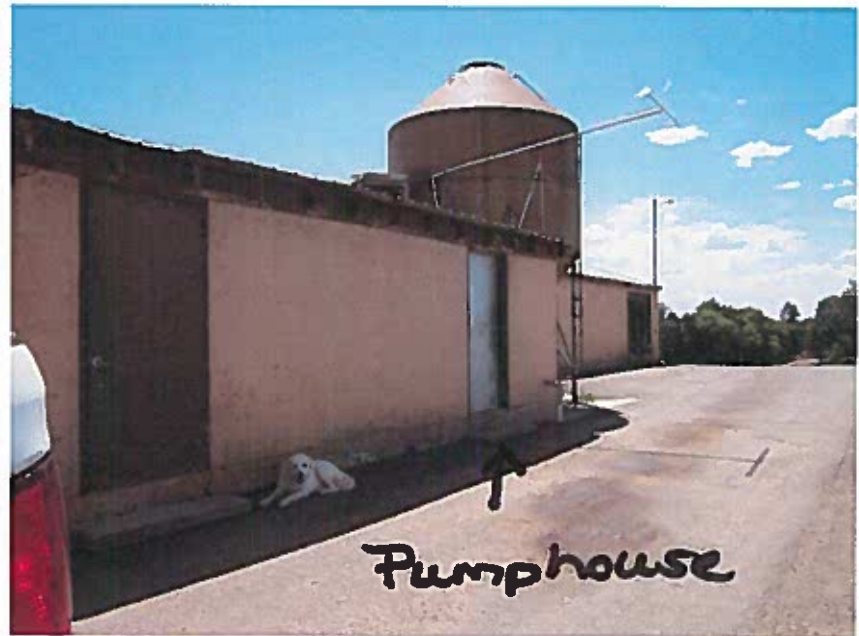
Reviewer

Date





well
and
5 HP



SENE

SWNW 2

SENW

36-8803

NESE

NWSW 3

NESW

STOCKWATER POV

24

19

pad

OBS 14E

OBS 15E

SESE

SWSW 4

Commercial
POV

SESW

NENE

25

NWNW 1

30

NENW

Field Exam
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The USDA-PSA Aerial Photography Field office asks to be credited in derived products.