

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

RECEIVED

AUG 24 2010

DEPARTMENT OF
WATER RESOURCES

A. GENERAL INFORMATION

Permit No. 63-33295

1. Owner E. G. Johnson Farms Phone No. 208-722-5829

Current address 24007 Hwy 20-26, Parma, ID 83660

2. Examiner's name Terry Scanlan, P.E. (Examiner No. 11-129) EXAM DATE August 5, 2010

3. Accompanied by Jeff Johnson Email

Address same as above

Relationship to permit holder Manager/Owner Phone No. 208-722-5829

4. Source Gound Water tributary to

B. OVERLAP REVIEW

1. Other water rights with the same place of use 63-11131

2. Other water rights with the same point of diversion 63-11131

C. DIVERSION AND DELIVERY SYSTEM

1. Point(s) of Diversion:

Ident. No.	Gov't Lot	¼	¼	¼	Sec	Twp	Rge	County	Method of Determination/Remarks
6"			NE	NE	25	5N	5W	Canyon	Exam, 2009 Photo (Well 1)
8"			NE	NE	25	5N	5W	Canyon	Exam, 2009 Photo (Well 3)
8"			NW	NE	25	5N	5W	Canyon	Exam, 2009 Photo (Well 2)

2. Place(s) of Use: Method of determination Exam, 2009 Photo

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
5N	5W	25	S	S	S	S													

3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe diameter (inside), as applicable. Use the space provided or ☒ see attached.

Scale: 1" = _____

- ☒ Copy of USGS Quadrangle attached showing location(s) of point(s) of diversion and place(s) of use (required)
☒ Aerial photo attached (required for irrigation of 10+ acres)
☒ Photo of diversion and system attached

4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
Well 1 - 6" (NENE)		3		Submersible	
Well 2 - 8" (NWNE)		5		Submersible	
Well 3 - 8" (NENE)		5		Submersible	

*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:

See Attachment C

E. NARRATIVE/REMARKS/COMMENTS

Three wells equipped with submersible pumps supply ground water to 1,470 range cattle through an integrated stock watering system consisting of buried 1.5 and 2-inch pvc pipe and concrete watering tanks. The feedlot facility has capacity for up to 3,000 cattle. Overlapping license 63-11131 covers the remaining 1,530 cattle with the same diversion system.

The 1993 licensing exam for water right 63-11131 described a 6" and an 8" well, both located in the NENE, S25. Based on field exam well photos, water right owner confirmed that the 8-inch well is actually located in the NWNE, S25 and is shown as Well 2 on the attached maps. Transfer No. 76111 corrected the location of the licensed 8-inch well (Well 2) and added Well 3 to water right 63-11131.

The 6" well, shown as Well 1, was drilled in 1985 (attached well log No. 820159) in the NENE as described on the license. This well is the oldest of the three wells and serves as an emergency back-up source.

Well 2 was drilled to 204 feet in 1988 (attached well log No. 63-88-Z-39) and deepened to 300 feet in 1989. A well log was not found for deepening the well. Well 2 is equipped with a variable speed pump and serves as the feedlot's primary well.

Another 6" well, shown as Well 3, was drilled in 2002 (attached well log No. 772933) approximately 5 feet south of Well 1 in the NENE. This well serves as the feedlot's secondary well and automatically kicks on when stockwater demand exceeds the operating parameters of Well 2.

Please note that all three associated well logs incorrectly describe the locations of the wells.

Permit 63-33295 listed a total diversion rate of 0.42 cfs based on the following: 0.32 cfs for 1,470 cattle and 0.10 cfs additional flow rate not licensed on right 63-11131 due to the limited capacity of Wells 1 & 2. With the addition of Well 3, the total system capacity is now 0.36 cfs as indicated in Attachment C. This right when combined with license 63-11131 is limited to 0.36 cfs and 40.8 afa.

Attachment A is a copy of the permit and proof of beneficial use

Attachment B is copies of the well drillers' reports

Attachment C is the system capacity and flow calculations

Attachment D is a topographical map and aerial photo

Attachment E is photos of the place of use and wells

Has the permit holder met all conditions of permit approval, including any mitigation requirements and/or measuring device installation requirements? ☒ Yes ☐ No If no, what must be done to meet the permit requirements?

F. FLOW CALCULATIONS

Additional computation sheets attached

Measured Method:

See Attachment C

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$ _____

$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 =$ _____

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

2. Volume Calculations for Other Uses:

Potential: $0.36 \text{ cfs} \times 365 \text{ days/year} \times 1.9835 \text{ af/cfs} = 260.6 \text{ afa}$

Required: $1,470 \text{ range cows} \times 12 \text{ gpd/cow} \times 365 \text{ days/year} / 325,850 \text{ gallons/af} = 19.8 \text{ afa}$

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
Stockwater	1/1	12/31	0.36 cfs	19.8 afa
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
Totals:			0.36 cfs	19.8 afa

2. Recommended Amendments

☐ Change P.D. as reflected on page 1 ☐ Add P.D. as reflected on page 1 ☒ None

☐ Change P.U. as reflected on page 1 ☐ Add P.U. as reflected on page 1 ☐ Other

I. AUTHENTICATION

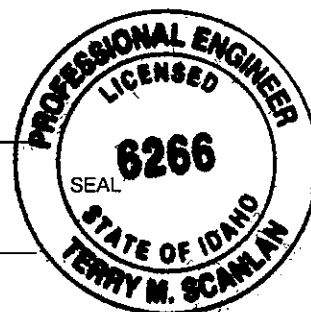
Field Examiner's Signature

Terry M. Scanlan

Date August 22, 2010

Reviewer _____

Date _____



ATTACHMENT A

PERMIT RECORD AND PROOF OF BENEFICIAL USE

State of Idaho
Department of Water Resources
Permit to Appropriate Water

NO. 63-33295

Priority: November 09, 2009

Maximum Diversion Rate: 0.42 CFS

This is to certify, that E G JOHNSON FARMS INC
24007 HWY 20-26
PARMA ID 83660

has applied for a permit to appropriate water from:

Source: GROUNDWATER

and a permit is APPROVED for development of water as follows:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>RATE OF DIVERSION</u>
STOCKWATER	01/01 to 12/31	0.42 CFS

LOCATION OF POINT(S) OF DIVERSION:

GROUNDWATER	NE 1/4 NE 1/4	Sec. 25, Twp 05N, Rge 05W, B.M., CANYON County
GROUNDWATER	NE 1/4 NE 1/4	Sec. 25, Twp 05N, Rge 05W, B.M., CANYON County
GROUNDWATER	NW 1/4 NE 1/4	Sec. 25, Twp 05N, Rge 05W, B.M., CANYON County

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	
05N 05W 25	X	X	X	X													

CONDITIONS OF APPROVAL

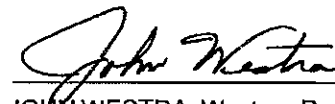
1. Proof of application of water to beneficial use shall be submitted on or before **June 01, 2015**.
2. Subject to all prior water rights.
3. Project construction shall commence within one year from the date of permit issuance and shall proceed diligently to completion unless it can be shown to the satisfaction of the Director of the Department of Water Resources that delays were due to circumstances over which the permit holder had no control.
4. After specific notification by the Department, the right holder shall install a suitable measuring device or shall enter into an agreement with the Department to use power records to determine the amount of water diverted and shall annually report the information to the Department.
5. Stock water use is for 1470 range cattle.

State of Idaho
Department of Water Resources
Permit to Appropriate Water

NO. 63-33295

6. Right holder shall comply with the drilling permit requirements of Section 42-235, Idaho Code and applicable Well Construction Rules of the Department.
7. This right does not grant any right-of-way or easement across the land of another.

This permit is issued pursuant to the provisions of Section 42-204, Idaho Code. Witness the signature of the Director, affixed at Boise, this 20th day of May, 20 10.


JOHN WESTRA, Western Regional Manager



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DEPARTMENT OF
WATER RESOURCESSTATE OF IDAHO
DEPARTMENT OF WATER RESOURCES**STATEMENT OF COMPLETION
FOR SUBMITTING PROOF OF BENEFICIAL USE****FOR OFFICE USE ONLY**Amt. of Fee \$: _____
Receipt No. _____
Receipt By: _____
Date Received: _____

The Idaho Department of Water Resources considers this form a statement by the permit holder(s) that development of a water right has been **completed** and that water has been applied to beneficial use to the extent described below. **This form must be accompanied by an examination fee, when necessary, or by a completed Beneficial Use Field Report prepared by a certified water right examiner.** Please refer to the instructions and fee schedule for this form. If ownership of the permit has changed, please contact any Department office or visit the Department's website at: www.idwr.idaho.gov for an *Assignment of Permit* form. If you wish to relinquish your permit because you have not established the authorized use of the water and are not applying for an extension, please notify the Department in writing.

1. Permit No. 63-33295 Telephone No. 208-722-58292. Name of Permit Holder(s): E. G. Johnson Farms, Inc.3. Mailing Address: 24007 Hwy 20-26 City Parma
State ID Zip 83660 Email: _____4. Source of Water: Ground Water If **GROUND WATER** (well), Date Drilled: mo. _____ / yr. '85, '88, '02
Well Driller: Doty & Riverside Drilling Permit Number: 820159, 63-88-Z-39, 7729335. Extent of use(s) completed (as authorized by the water right permit):
Domestic (No. of households): _____ Stockwater (No. and type of stock): 1,470 Range Cattle
Irrigation (No. of acres): _____ Other: _____6. Total rate of diversion or storage volume for which proof is submitted: 0.42 cfs OR _____ acre-feet.7. Compliance with a measuring device requirement, lockable controlling device requirement, and/or other conditions of permit: **Refer to the approval conditions on your permit and respond accordingly. The Department will not issue a license if permit conditions are not met.****Measuring Device:** Is a measuring device required?Yes ☐ No ☒

If yes, has the measuring device been installed?

Yes ☐ No ☐**Lockable Controlling Device:** Is a lockable device required to control the diversion?Yes ☐ No ☒

If yes, has the lockable device been installed?

Yes ☐ No ☐**Other Conditions of Permit:** Do the approval conditions on your permit require you to submit additional information in connection with your proof of beneficial use? If yes, list the conditions below and attach documents with the required information._____
Completed? Yes ☐ No ☐8. Fee Enclosed: \$ n/a See fee schedule on back of the instructions for filing proof of beneficial use.
Proofs filed without an appropriate fee, will be considered incomplete.

9. Person to contact to accompany the Department representative during field examination of the water system.

Name: _____ Telephone Number: _____

Mailing Address: _____ City _____

State _____ Zip _____ Email: _____

The information given on this form is my true statement of the extent to which the above numbered permit has been developed and water has been diverted and applied to a beneficial use. I understand that any undeveloped portion of the permit is relinquished to the State of Idaho.

Signature of permit holder: _____ Date: 8/5/2010
(include your title, if on behalf of company or organization)

ATTACHMENT B
WELL DRILLERS' REPORTS

USE TYPEWRITER OR
BALLPOINT PEN

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.

[illegible]

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

USE ADDITIONAL SHEETS IF NECESSARY

NeNe S25 SN SW

ACD 14 12

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

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

☒ Air ☐ Flowing Artesian

Water Quality test or comments: _____

Depth first Water Encounter _____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
12	0	1	Gravel		X
12	1	4	fine sand		X
12	4	12	Sandy clay		X
12	12	20	Gravel		
8	20	42	Gravel	X	
8	42	54	Coarse sand	X	
8	54	100	Blue clay		X
8	100	105	Sandstone		X
8	105	120	Dark Brown Clay		X
8	120	207	Blue Clay		
8	207	235	fine Blue Sand	X	

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

5. TYPE OF WORK check all that apply (Replacement etc.)
☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT	METHOD
Material	From	To	Seals or Pads	
35 Bentonite	0	20	10 Seals	Over bore.

Was drive shoe used? ☒ N Shoe Depth(s) 297

Was drive shoe seal tested? ☒ YE ☐ N How?

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Weld	Welded	Threaded
8"	7-2	297	20	Std. 1	X	U	X	U
					U	U	U	U
					U	U	U	U

Length of Headpipe 15' Length of Tailpipe _____

9. PERFORATIONS/SCREENS

Partirations

Method LRAS/Down

Screens

Screen Type *Free* *Free* *Free* *Free*

From	To	Shot Size	Number	Diameter	Material	Coating	Uses
195	210			5"	Steel	☒	☐
210	220			5"		☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

— ft. below ground Artesian pressure / lb.

Depth flow encountered ft. Describe access port or
control devices: Sanitary well cap.

Completed Depth 220' (Measurable)
Date: Started Apr 16, 02 Completed Apr 22, 02

13. DRILLER'S CERTIFICATION

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

Company Name Riverdale & Inc Firm No: 333

Farm Official 1-1-1 Date 1-1-1

and

Driller or Operator Date 3-15-02

1. Start-Up & Firm Official & Operator

FORWARD WHITE COPY TO WATER RESOURCES

ATTACHMENT C
FLOW CALCULATIONS

FLOW CALCULATIONS

Permit allows 0.42 cfs or 189 gpm

License 63-11131 allows 0.24 cfs or 108 gpm

Theoretical capacity for Wells 1 & 2 was licensed at 0.24 cfs for water right 63-11131

Well 1: 3 hp Pump Set @ 35 (per 63-11131 licensing exam)

SWL = 6'

Spec Cap per well log = 90 gpm/14.5' DD = 6.2 gpm/ft

TDH = 6' SWL + 138.6' (60 psi) + 5' H + 8' DD = 157.6'

$$\frac{3 \text{ hp} \times 8.8 \times 0.7}{157.6'} = 0.12 \text{ cfs (54 gpm)}$$

Well 2: 5 hp Pump Set @ 100' (per 63-11131 licensing exam)

SWL = 20'

Spec Cap per well log = 100 gpm/160' DD = 0.63 gpm/ft

TDH = 20' SWL + 138.6' (60 psi) + 10' H + 80' DD = 248.6'

$$\frac{5 \text{ hp} \times 8.8 \times 0.7}{248.6'} = 0.12 \text{ cfs (54 gpm)}$$

Well 3: 5 hp Pump Set @ 126' (per owner)

SWL = 6' (log indicates none, however used 6' since Well 3 is located next to Well 1)

Spec Cap per well log = 60 gpm/120' DD = 0.5 gpm/ft

TDH = 6' SWL + 138.6' (60 psi) + 10' H + 100' DD = 255'

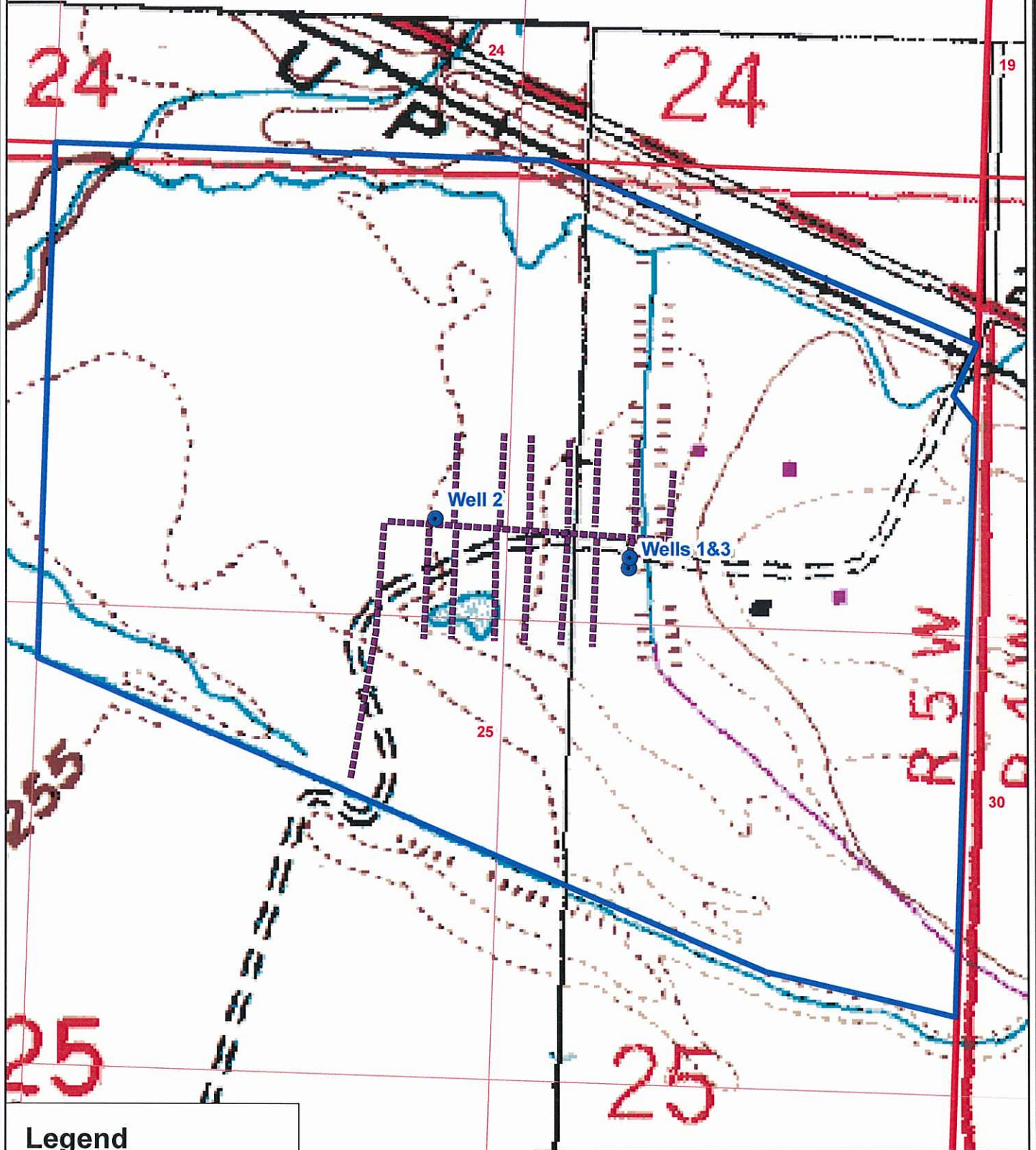
$$\frac{5 \text{ hp} \times 8.8 \times 0.7}{255'} = 0.12 \text{ cfs (54 gpm)}$$

0.12 cfs (3 hp pump) + 0.12 cfs (5 hp pump) + 0.12 cfs (5 hp pump) = **0.36 cfs System Capacity**

ATTACHMENT D
TOPO MAP AND 2009 AERIAL PHOTO

T5N R5W

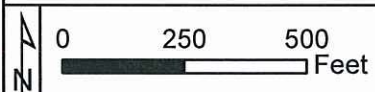
2009 Photo



Legend

- PODs
- POU
- Mainline System

Permit 63-33295



T5N R5W

2009 Photo

24

19

Well 2

Wells 1&3

25

30

Legend

● PODs

□ POU

----- Mainline System

Permit 63-33295



0 250 500
Feet



ATTACHMENT E
PHOTOS



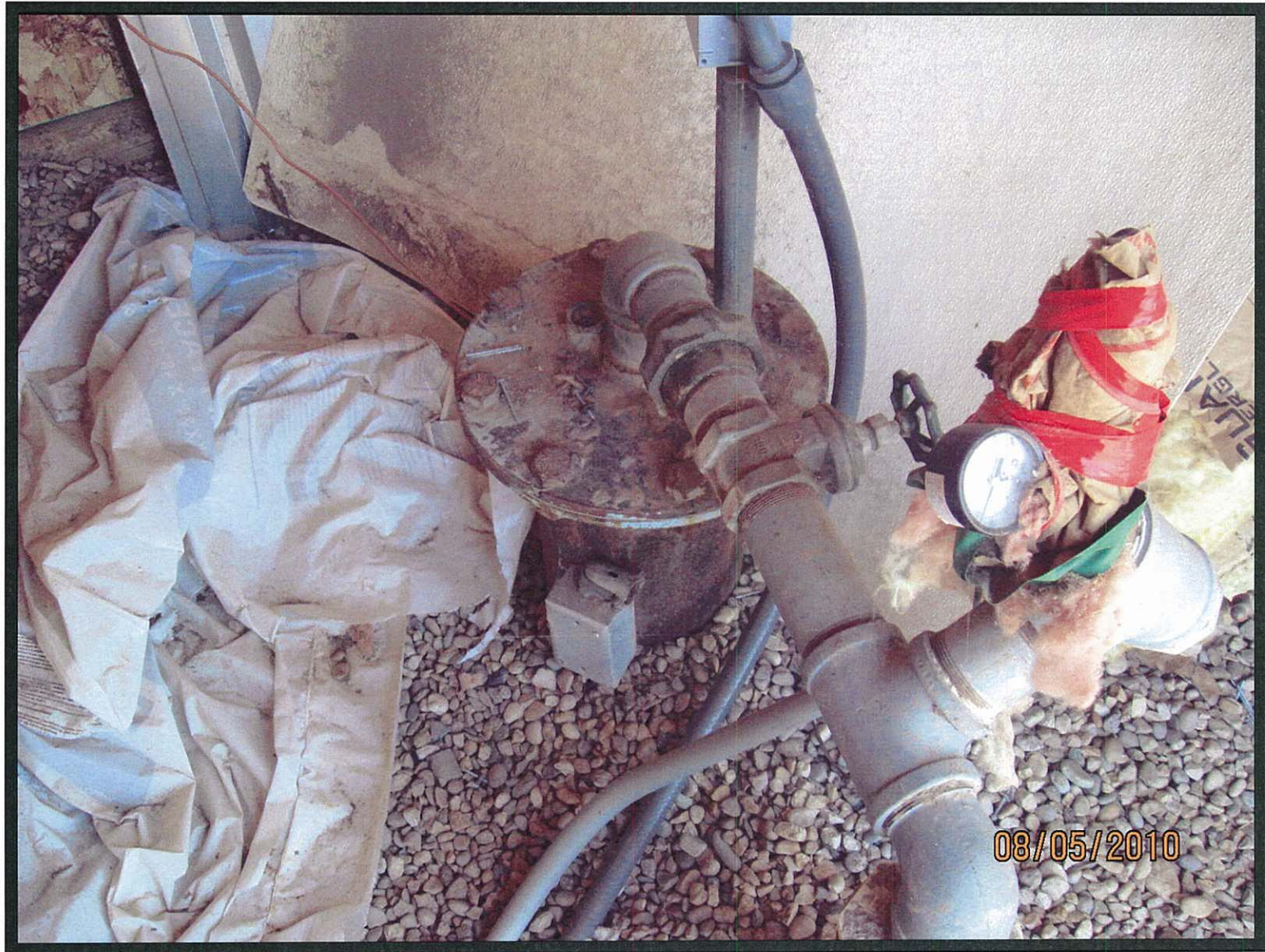
Well 1



Well 3



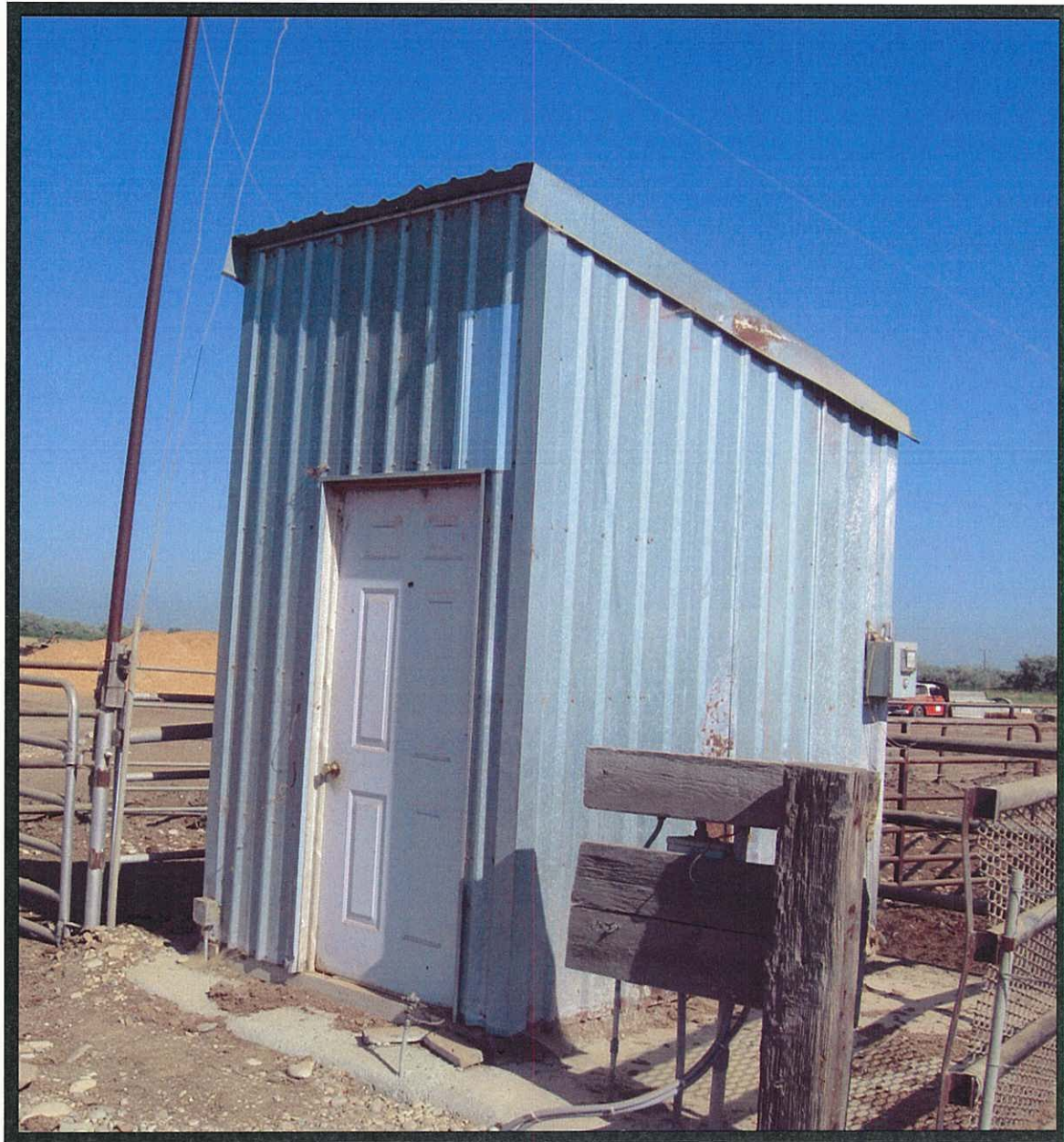
Well House for Wells 1 & 3



Well 2



Variable Speed Controls for Well 2



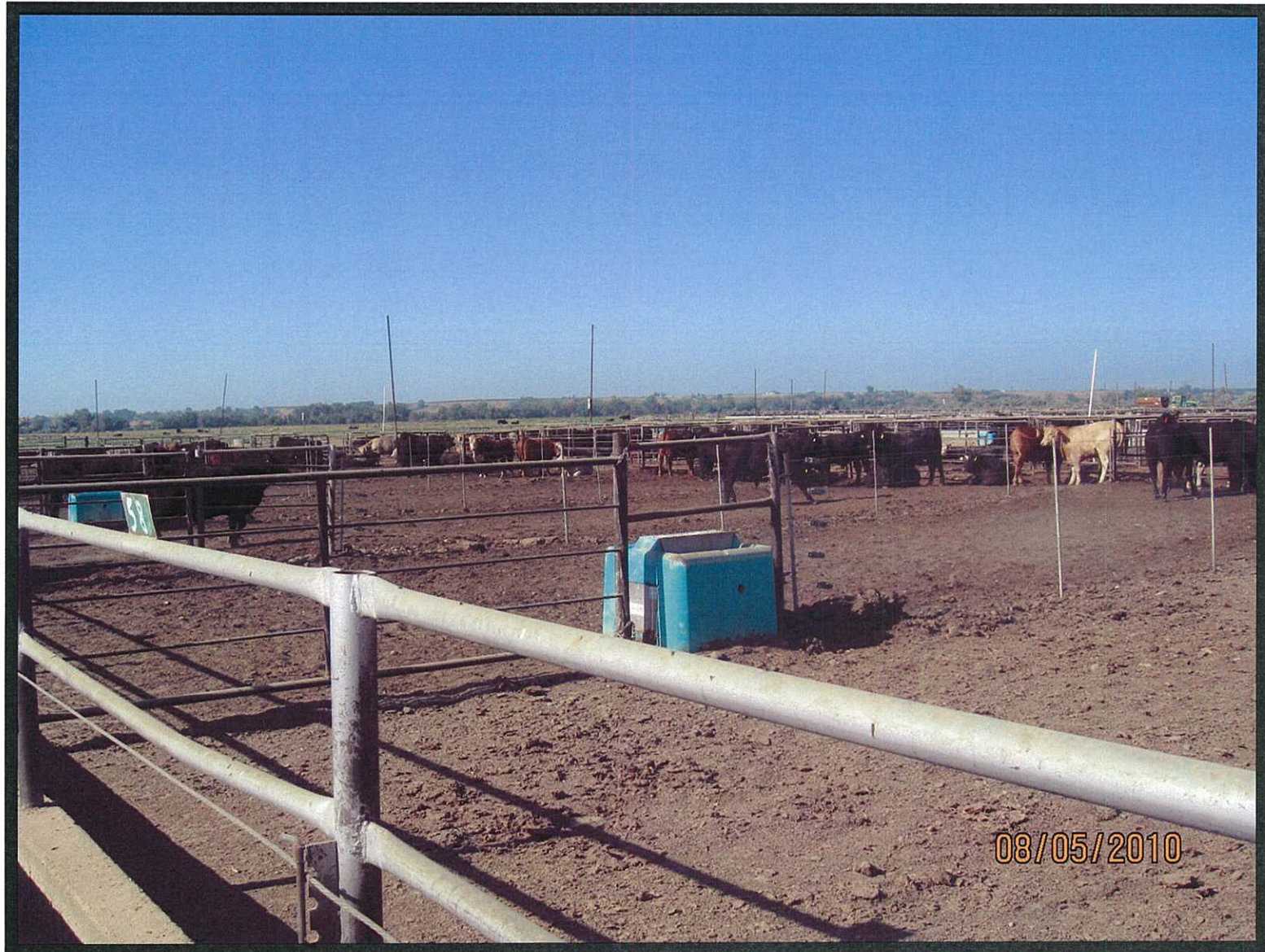
Well House for Well 2



Sample of Buried Mainline (1.5-inch)



Place of Use in the NENE



Place of Use in the NWNE