

A. GENERAL INFORMATION

Exam Date: 9/10/2008

- | 3. <u>SOURCE</u> | <u>TRIBUTARY</u> |
|------------------|------------------|
| GROUND WATER | |

1. Other water rights with the same place of use: *NONE*
2. Other water rights with the same point of diversion: *NONE*

Method of Determination: Site Visit

2. PLACE OF USE: DOMESTIC

[illegible]

Method of Determination:

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</u> <u>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>
407171	GOULAS	15		GOULAS	

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

D. FLOW MEASUREMENTS

1.

<u>Measurement</u> <u>Equipment</u>	<u>Type</u>	<u>Make</u>	<u>Model No.</u>	<u>Serial No.</u>	<u>Size</u>	<u>Calib. Date</u>
GE PARAMETRICS	ULTRASONIC		AT 878			

2. Measurements:

AVERAGE FLOW RATE: 193.5 GPM

$$193.5 \text{ GPM} \left(\frac{0.0028 \text{ CFS}}{9 \text{ GPM}} \right) = 0.43 \text{ CFS}$$

E. FLOW CALCULATIONS

____ Additional Computation Sheets Attached

Measured Method:

THEORETICAL

$$Q = \frac{8.8(44)(0.70)}{\text{LIFT} + (151(2.31))}$$

② 10 PSI ADDED FOR FRICTION LOSS

$$Q = \frac{8.8(15)(0.70)}{189.5 + (10(2.31))} = 0.43 \text{ CFS}$$

① LIFT CALCULATED BY SUBTRACTING THE STATIC WATER LEVEL BY THE TOTAL WELL DEPTH, DIVIDING THAT BY 2, THEN ADDING THAT NUMBER TO THE STATIC LEVEL TO GET ESTIMATED PUMPING LEVEL
 $(120' - 59') / 2 + 59' = 89.5'$

③ 100' ELEVATION GAIN TO WELL HOUSE, 189.5' TOTAL LIFT

F. 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:

G. NARRATIVE/REMARKS/COMMENTS

37-8877 and 37-21435 are for domestic use at Bluegrouse Ridge Subdivision 4 miles North of Hailey. Originally applicant proposed to divert 0.22 cfs, the amount covered by 37-8877. 37-21435 for 0.17 cfs was later filed to cover the additional rate the well could produce.

Point of diversion is in the NENE T03N R18E Section 20. During examination a total of 16 lots were found to be connected to the system. Only area allowing irrigation outside of home lots is the single entry way lot as authorized by 37-21435.

An average flow of 193.58 or 0.43 cfs was measured using the Panametrics meter. A theoretical analysis yields 0.43 cfs verifying the rate measured during the exam. The system will be limited to a total of 0.39 cfs: 0.22 cfs for 37-8877 and 0.17 cfs for 37-21435.

Have conditions of permit approval been met? X 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	1/01 to 12/31	0.22 CFS (37-8877)	
		0.19 CFS (37-21435)	
<u>Totals:</u>		0.39 CFS	

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 Other

I. AUTHENTICATION

Field Examiner's Name Nick Van Dyke Date 9/10/08

Reviewer Nick Van Dyke Date 3/2/09

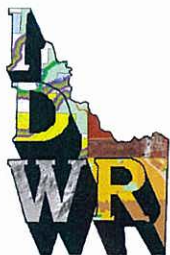
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Log Title D:\salmon river stuff\9-10-08 data\37-8787.LOG
Start Time 9/10/2008 13:05
End Time 9/10/2008 13:13
Records 3
Interval 60
Error Flags 8208
Cyclic Flags 2

Measurement for field exam 37-8787 by Dan Nelson and Nick Van Dyke

Item#	Label	Symbol	Unit	Type	Channel	Comport	Computer	Decimal	Width	Input	NodeID
0	Velocity	ft/s	578	0	0	PT878		4	12	2	0
1	Volume	gal/m	846	0	0	PT878		4	12	3	0
2	(+)Total	gal	1160	0	0	PT878		4	12	20	0

Date/Time	Velocity(ft/s)	Volume(gal/m)	(+)Total(gal)	Error#
9/10/2008 13:05:15	4.29	195.06	1061467.122	0
9/10/2008 13:06:15	4.29	194.94	1061657.742	0
9/10/2008 13:07:15	4.27	194.16	1061854.768	0
9/10/2008 13:08:15	4.27	194.00	1062045.089	0
9/10/2008 13:09:15	4.27	194.09	1062241.710	0
9/10/2008 13:10:15	4.27	194.09	1062431.702	0
9/10/2008 13:11:15	4.26	193.59	1062628.071	0
9/10/2008 13:12:16	4.28	194.24	1062827.757	0
9/10/2008 13:13:15	4.28	194.44	1063015.798	0

Last Total	First Total	Number of Readings	Average Flow Rate in GPM
1063015.798	1061467.122	8	193.58



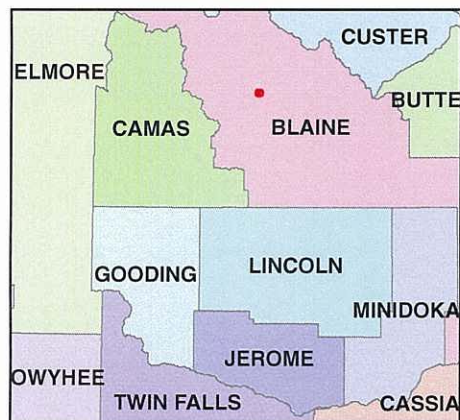
Idaho Department of Water Resources

Legend

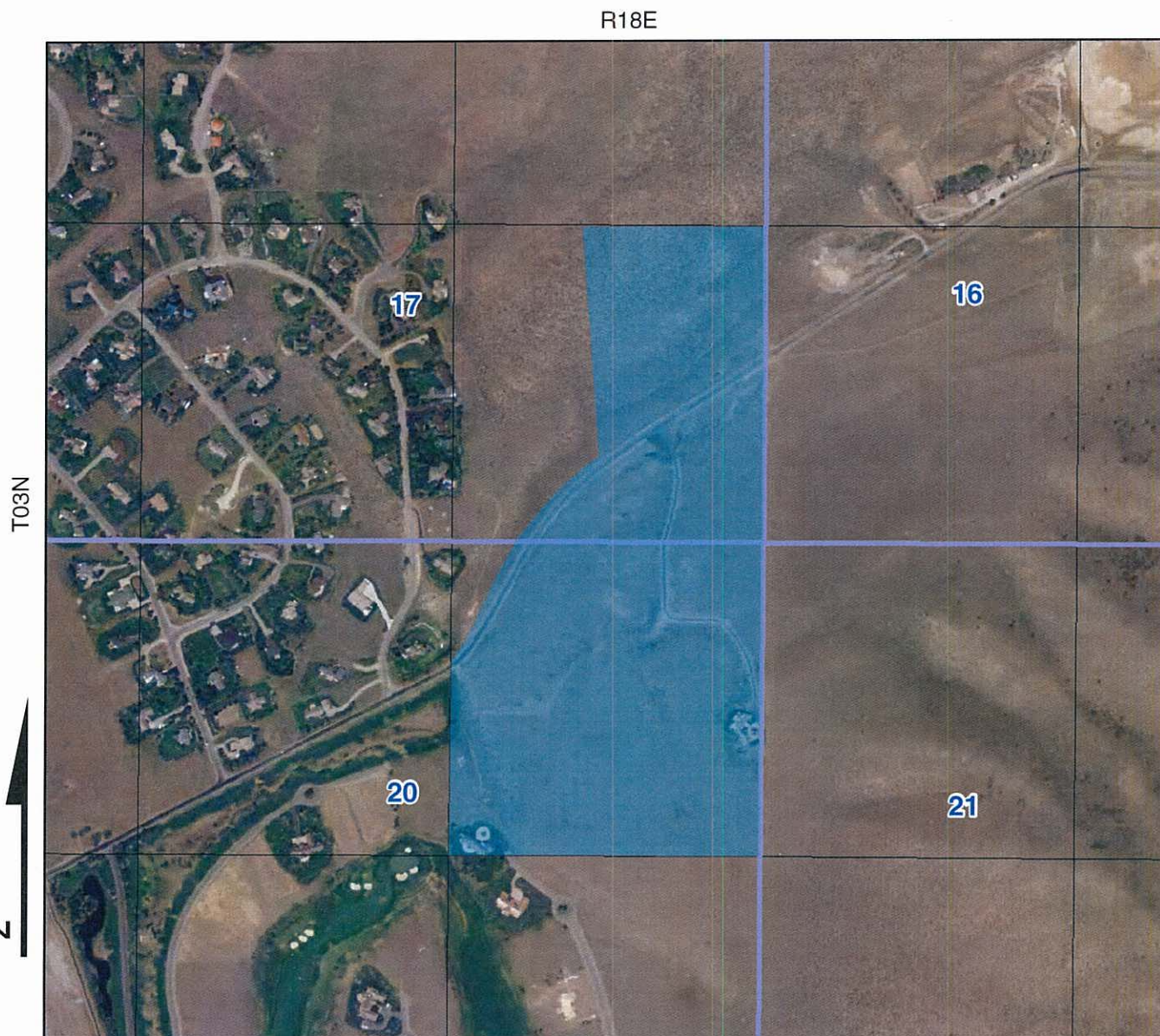
-  license_POU
-  PLS Sections
-  Quarter Quarters

Water Right

37-8877
37-21435

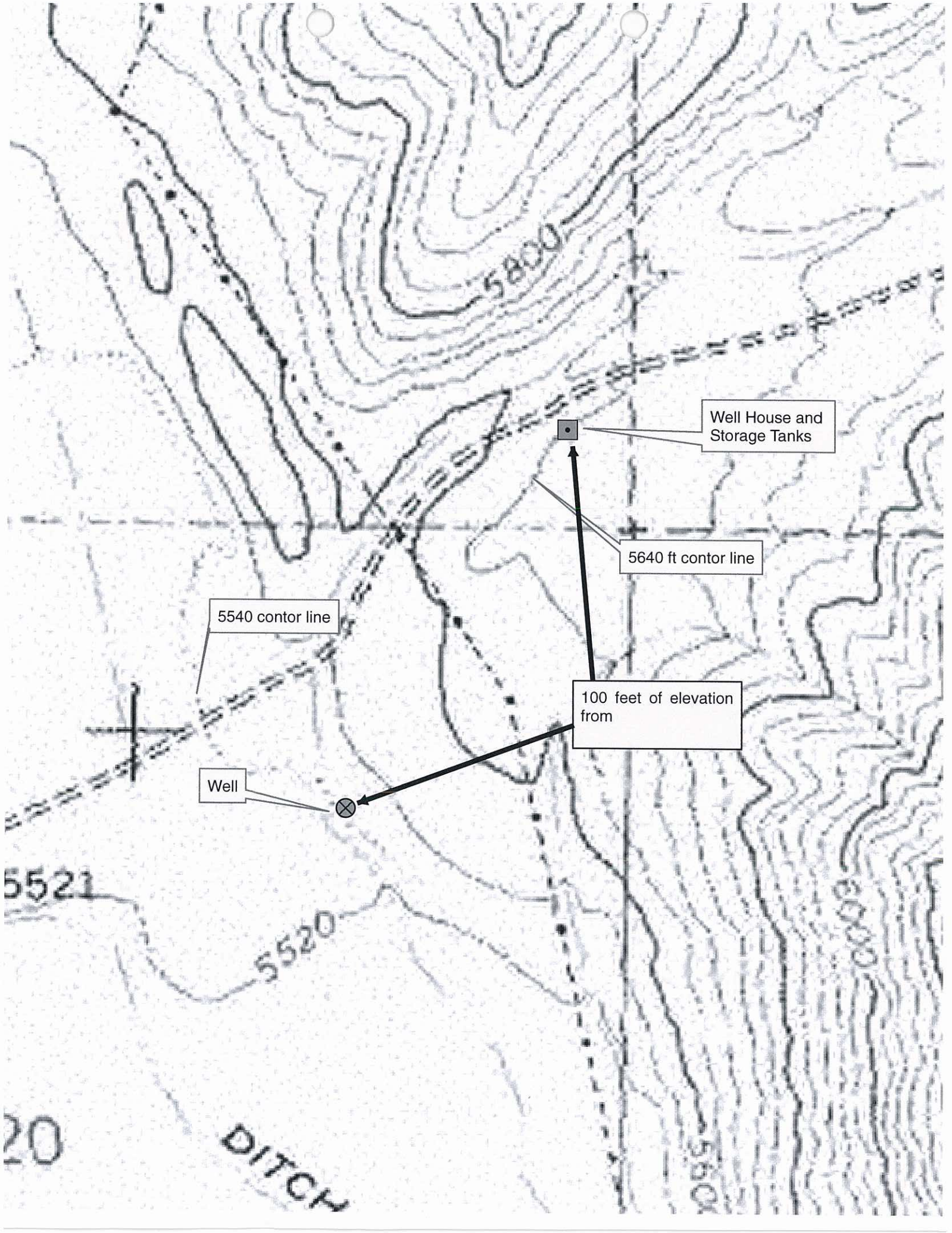


Blaine County
IDWR Basin 37



0 0.125 0.25 0.5 Miles

Prepared by Nick Van Dyke
On March 02, 2009
2004 Aerial Photography



Well

5540 contor line

5640 ft contor line

Well House and
Storage Tanks

100 feet of elevation
from

5521

5520

5800

20

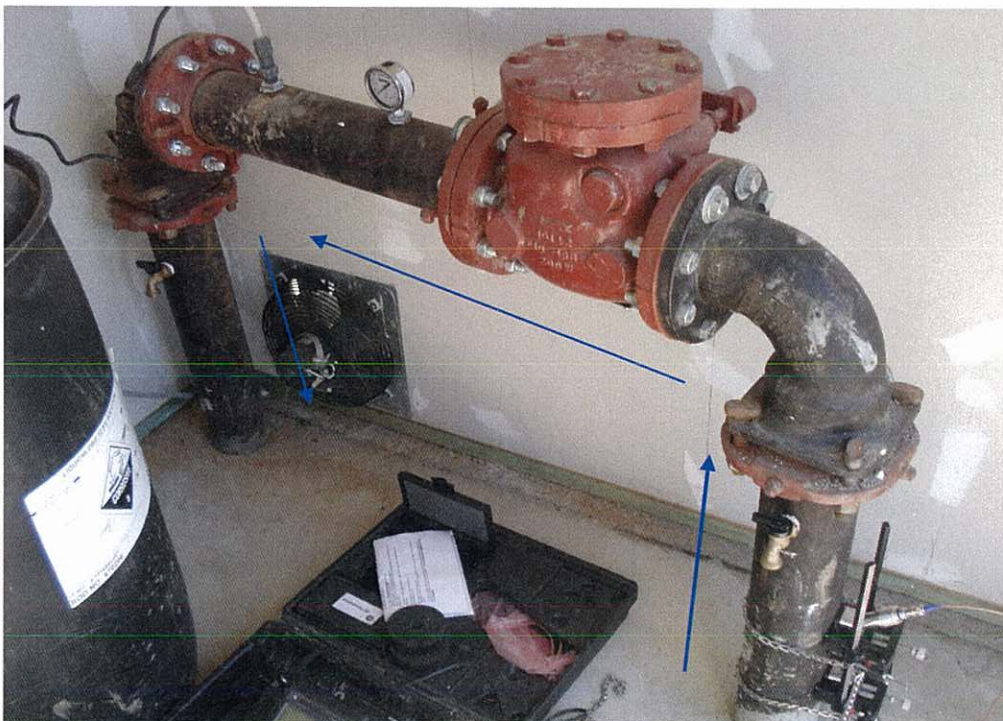
DITCH

5600

5600



- Looking northeast, well in the foreground. Water is pumped to the well house roughly 600 yards to the northeast (**red arrow**) on the other side of the ridge in the picture.



- Water entering the well house from the point of diversion. Direction of flow shown by arrows.



- **Well house. Large motor on left is a 60 hp fire pump. There are two 7.5 hp booster pumps and one 3 hp pony pump that provide water to the subdivision.**



- **Four underground storage tanks**



- **Place of use from Ohio Gulch Rd. Beginning looking northeasterly on the left then swinging 180° ending on the right looking southwesterly. Entry way lot that is authorized to have irrigation without connection to a home is generally in the photo with the pickup, and the photo to the immediate right.**



- **Place of use from center of subdivision. Beginning looking northerly on the left then swinging 270° ending on the right looking westerly towards Hwy 75. There are a few lots not pictured that are generally behind this field of view.**