

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 75-7497

Exam Date: 8/6/2012

1. Current Owner: ELK BEND MUTUAL WATER CO
PO BOX 1045
SALMON ID 83467
(208)894-2237
2. Accompanied by: Chuck Ramsey
Phone No: (208) 894-2412
Address: 325 Elkhorn Road
Relationship to Permit Holder: Water manager for the Elk Ben Mutual Water Co.

3. **SOURCE****TRIBUTARY**

GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 75-7114 and 75-7009
2. Other water rights with the same point of diversion: 75-7114 and 75-7009

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

GROUND WATER L9 NW1/4SW1/4 Sec. 10, Twp 18N, Rge 21E, B.M. LEMHI County

Method of Determination: GPS and Visual Inspection.

2.

<u>PLACE OF USE:</u>				DOMESTIC																				Totals
Twp	Rge	Sec		NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
18N	21E	10								X	X	X	X	X	X	X	X	X	X	X	X	X	X	
										L 9	L 8			L 11	L 12			L 13						
18N	21E	15		X																				
				L 1																				

Method of Determination:

3. YES Delivery System Diagram Attached (required). Indicate all major components and distances between components. Indicate weir size/pipe as applicable.
- YES Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be 1:24,000 or greater.
- YES Aerial Photo Attached (required for irrigation of 10+ acres).
- YES 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
Site 1 Well 1: E0007343	Franklin Electric	5	2821139310	Submersible	2 inch discharge
Site 2 Well 1: E0007344	Franklin Electric	7.5	2822019210	Submersible	2 inch discharge
Site 2 Well 2: E0007345	Franklin Electric	7.5	2822019203	Submersible	2 inch discharge
Site 2 Well 3: E0007346	Franklin Electric	7.5	2822019210	Submersible	2 inch discharge

The highlighted well represents the point of diversion for this permit

D. FLOW MEASUREMENTS

- 1.
2. Measurements:

E. FLOW CALCULATIONS

Permit allows 1.0 cfs
Measured amount = 0.21

 X Additional Computation Sheets Attached

Recommend 0.21 cfs

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

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

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = n/a$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = n/a$$

2. Volume Calculations for Other Uses: **see calculation sheet**

Maximum allowed = 133.2 AF

0.21 cfs can provide 152 AF capacity

Recommend 133.2 AF

G. NARRATIVE/REMARKS/COMMENTS

The Elk Bend subdivision in T18N R21E Section 10 began with a single well in the early 1970's. Three more were added in the 1980's. The system is operated as water mutual and as buyers purchase lots they receive one share of stock in Elk Bend Mutual Water Company. There are 324 lots stubbed in for the Elk Bend Subdivision; however, they do not expect to have all 324 occupied. As of August 2012 there were 98 hookups.

Four wells operate to deliver water to the Elk Bend subdivision. All 4 pumps are normally available at any given time. This field exam reports delivery information for the fourth well located in the southern well house at Site 2.

Water right 75-7114 covers the original pump on the north side of the subdivision (Site 1). There are three pumps in the new pump house, near the south end of the subdivision. This second location houses three pumps for water rights 75-7114, 75-7009 and the point of diversion for water right permit 75-7497.

The four wells pump into a common system and the pumps rotate based upon need. Well site 2, well #1 operates during the irrigation season. Well site 2, wells two and three rotate and add additional water as needed. The water is used for domestic in-house use and for the irrigation of the lots around the houses.

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	1/01 to 12/31	0.21 CFS	133.2 AF
<u>Totals:</u>		0.21 CFS	133.2 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 ☐ Other

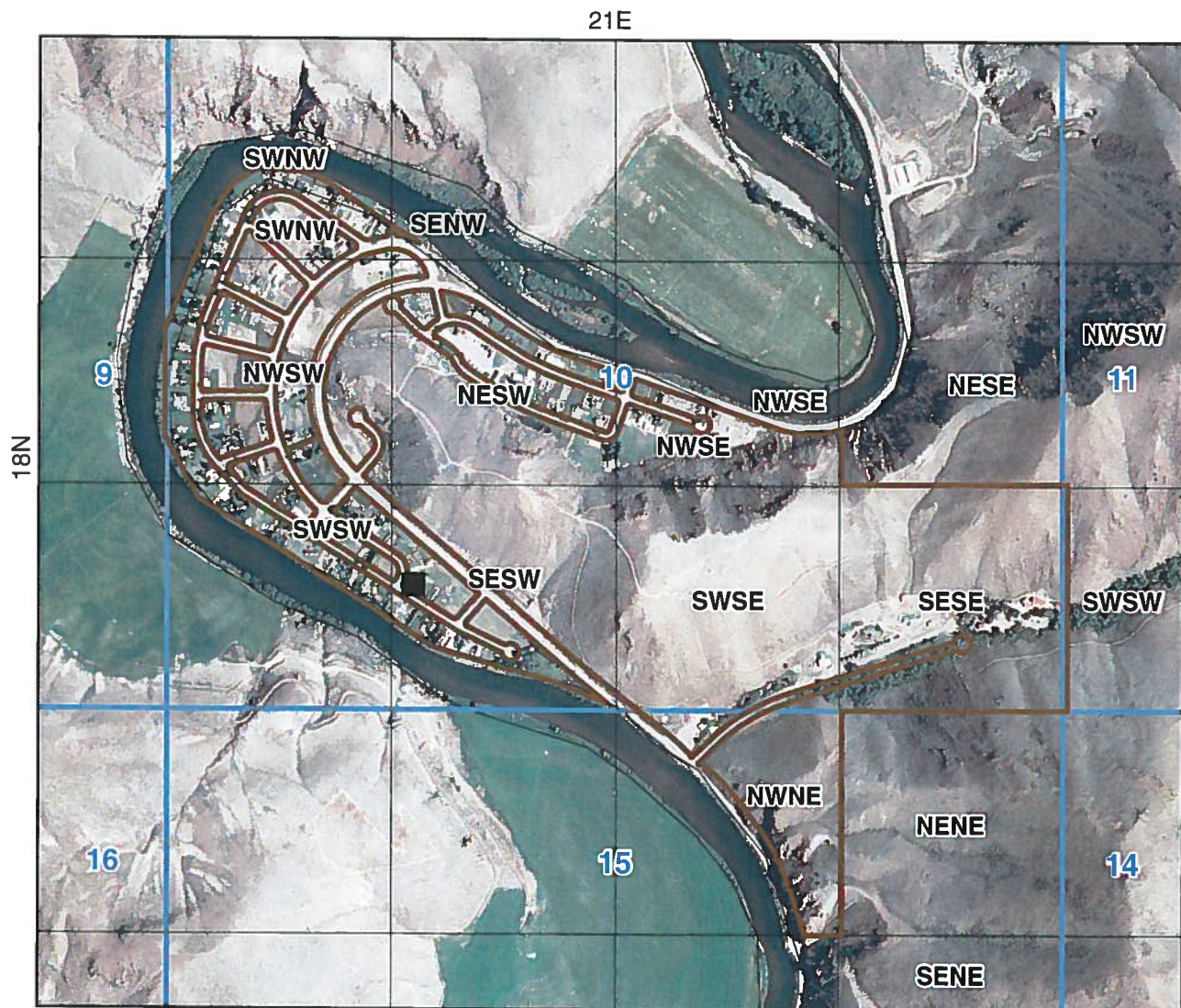
I. AUTHENTICATION

Field Examiner's Name Sandra Thurl Date 2/8/2013

Reviewer _____ Date _____

State of Idaho
Department of Water Resources
Water Right License
75-7497

This map depicts the RECREATION place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.



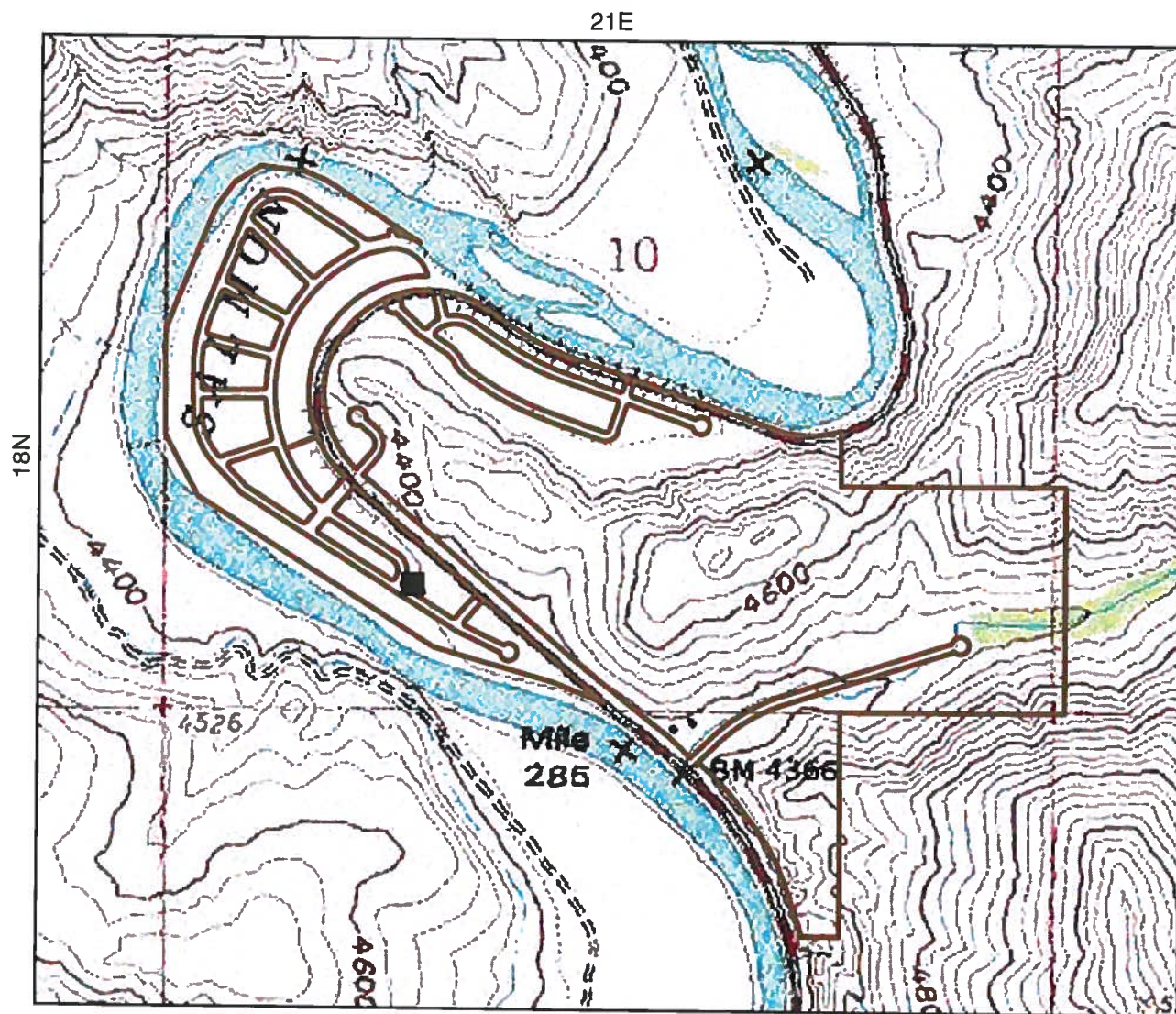
- Point of Diversion
- ▭ Place Of Use Boundary
- ▭ Townships
- ▭ PLS Sections
- ▭ Quarter Quarters



0 0.25 0.5 Miles

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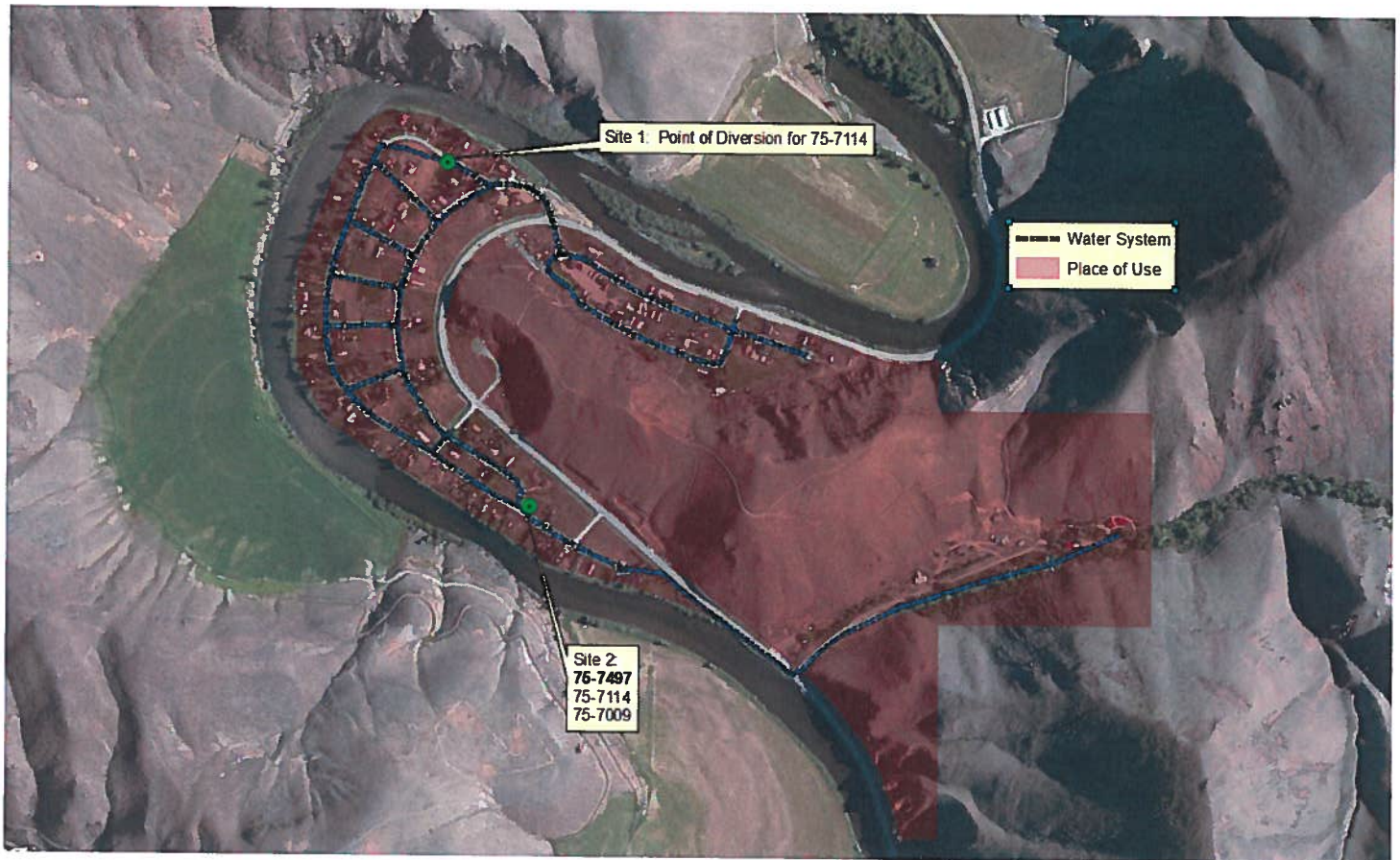


- Point of Diversion
- Place Of Use Boundary



0 0.25 0.5 Miles

Water Distribution System Water Right 75-7497



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Four wells operate to deliver water to the Elk Bend subdivision. The delivery paths are shown above as blue lines. All 4 pumps are normally available at any given time. This field exam reports delivery information for the fourth well located in the southern well house labeled above as Site 2.

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MEMORANDUM

TO: Water Rights File 75-7497
FROM: Sandra Thiel
DATE: February 8, 2012
SUBJECT: Rate and volume calculations

Measurements taken at two wells sites:

	Measurement Equipment	Beginning reading	Ending reading	Multiplier	Total Gallons	Minutes of reading	Gallons per minute	CFS
Site 1	Rockwell meter	79302400	79303000	100	600	10	60	0.13
Site 2 # 1	Mccrometer	8837210	8838010	1	800	8.3	96	0.21
Site 2 # 2	Rockwell meter	34407900	34408400	100	500	6	83	0.19
Site 2 # 3	Neptune	23382600	23383300	100	700	7.55	93	0.21

Flow Calculations:

The Maximum Instantaneous Water Requirements for Domestic Use in the *Field Examiners Handbook*, allows 0.75 cfs for 324 houses. (see attachment)

Existing water rights:

75-7114 0.30
75-7009 0.27
0.57 cfs

$0.75 - 0.57 = 0.18$

Measured amount for water rights 75-7114 (2 wells) and 75-7509 = 0.53 ($0.13 + 0.21 + 0.19 = 0.53$)

$0.75 - 0.53 = 0.22$

The measurement for permit 75-7497 found 0.21

From our measurements the two existing water rights supply 0.53 cfs this water plus the water from this permit at 0.21 cfs totals .74 cfs which is under the 0.75 that the chart allows.

0.21 cfs recommended for this water right

Volume Calculations:

324 subbed in lots
1.2 af for in-house and yard use
 $324 \times 1.2 = 388.8$ AF

Existing water rights:

75-7114 217.2 AF
75-7009 38.4 AF
255.4 AF

$388.8 - 255.5 = 133.2$ AF available for water right 75-7497

0.21 cfs calculated above

$0.21 \text{ cfs} \times 1.9835 \times 365 = 152$ AF

133.2 AF recommended for this water right

324 houses stubbed in

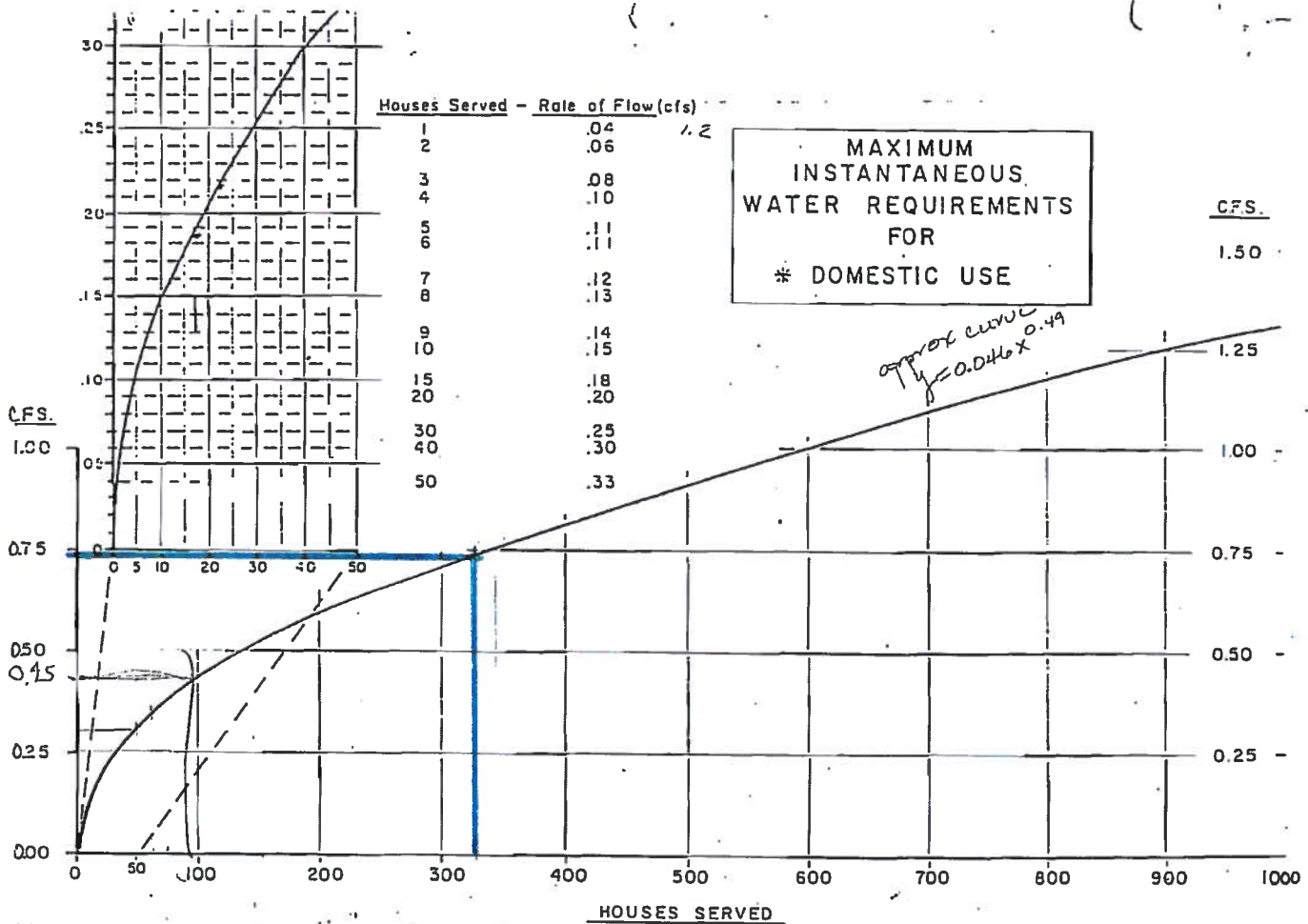
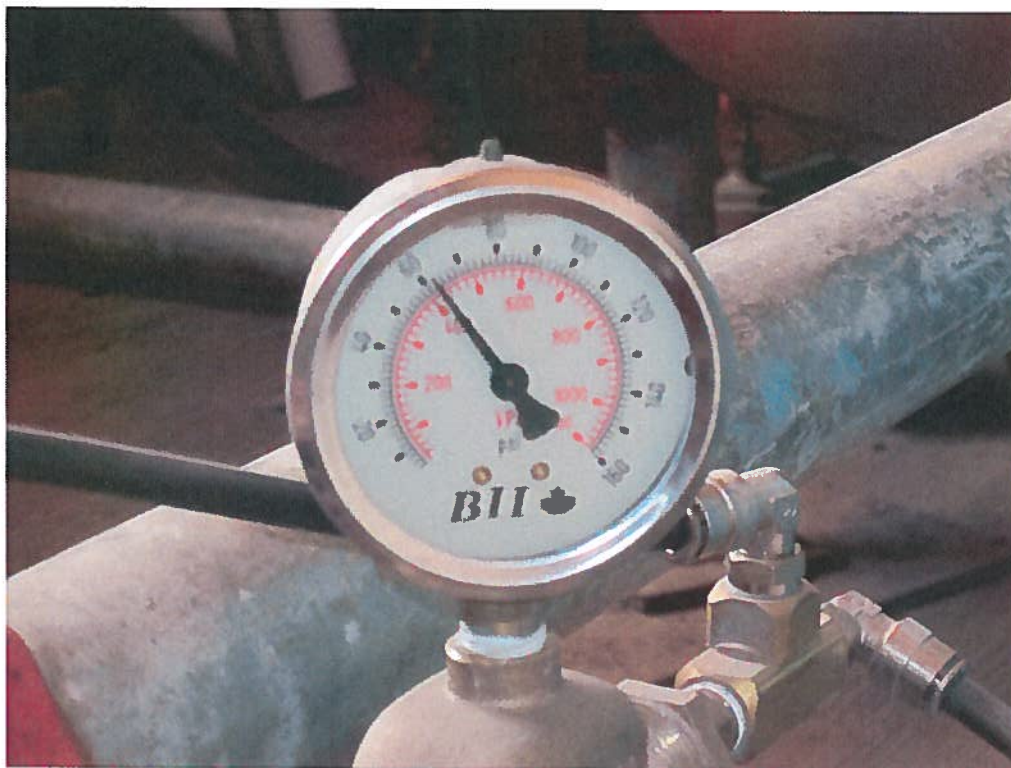
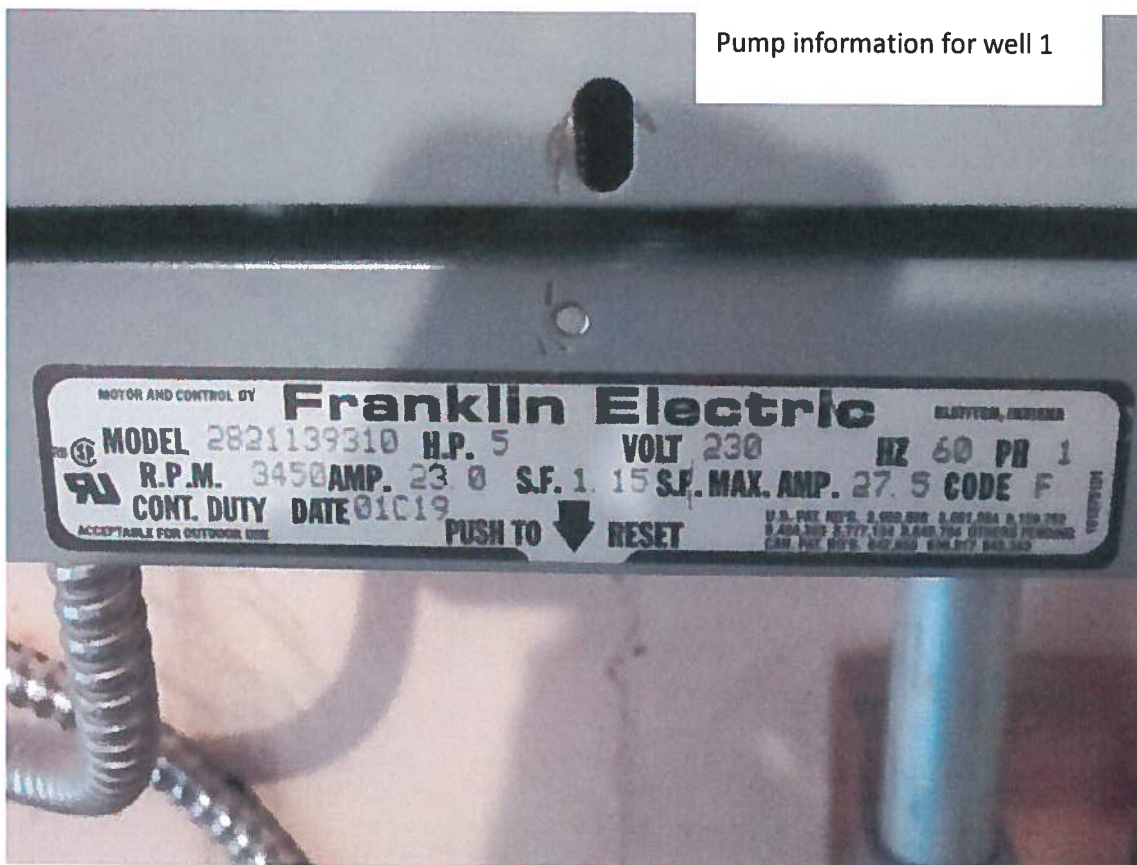


Exhibit 12

PHOTOGRAPHER AND DATE OF PHOTOS: Sandy Thiel, October August 6, 2012
FILE NUMBER: 75-7497



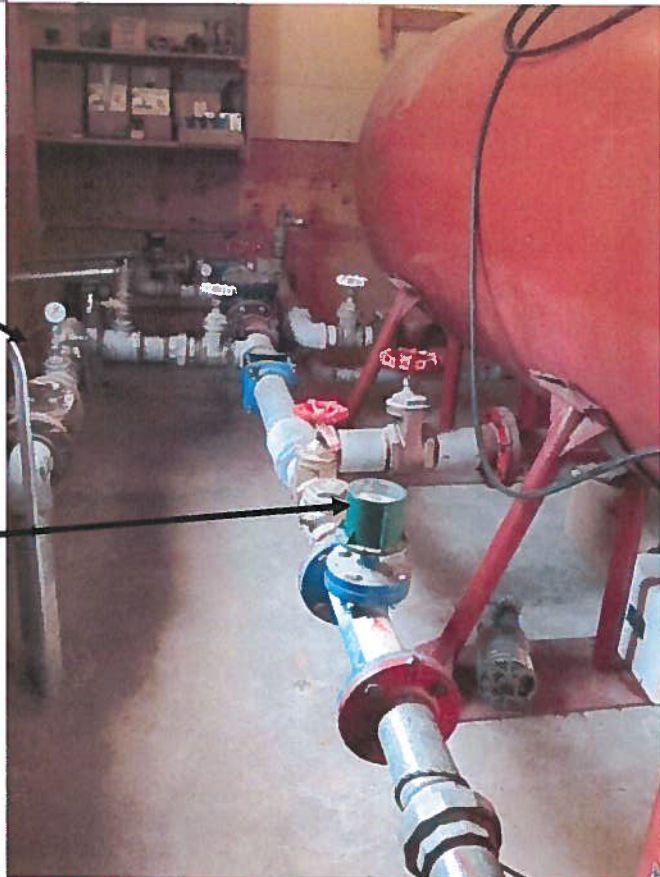
Pressure gage for
water right 75-7114 in
well house 1



Pump information for well 1



Flow meter in well house 2 for well # 2



Well 2

System for wells 1 and 2 in the second well house

Well 1



Pressure tank in well house 2

Flow meter
for well 3



Piping for well 3