

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 95-16186
Exam Date: 6/9/2017

1. Current Owner:
EAST SNOWY LN HOA
C/O KIRTIN DARRY
PO BOX 798
ATHOL ID 83801
2. Accompanied by: Kirstin Darry
Phone No: 208-659-3070
Relationship to Permit Holder: Member of HOA
3. **SOURCE:**
GROUND WATER

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 95-16181
2. Other water rights with the same point-of-diversion: 95-16181

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

GROUND WATER NW¼SW¼ Sec. 13, Twp 53N, Rge 03W, B.M. KOOTENAI County
GROUND WATER NW¼SW¼ Sec. 13, Twp 53N, Rge 03W, B.M. KOOTENAI County

Method of Determination: Maps and GPS. POD's located at:

D0059493: -116° 39.175, 47° 56.406 given IDWR tag A0015426
D0059415: -116° 39.169, 47° 56.334 given IDWR tag A0015425

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	
53N	03W	13										X	X						

Method of Determination: Google Earth, Bing maps, and Arcmap.

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.

Well or Diversion ID No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
D0056493	FRANKLIN	5			
D0059415	FRANKLIN	3			

*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 CALCULATIONS☒ Additional Computation Sheets Attached

Measured Method: Attached will be two pump curves showing diversion rates where they are placed. I have identified the well tag number in the upper right hand corner.

D0059415 – 3hp with diversion rate of 11 gpm or 0.02 cfs

D0056493 – 5hp with diversion rate of 24 gpm or 0.05 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: Domestic use for 4 homes with irrigation up to ½ acre – 4 homes x 1.2 = 4.8 AF

3 homes

3.6 AF

G. NARRATIVE/REMARKS/COMMENTS

Permit's 95-16181 and 95-16186 were both due for field inspection and both were in the name of East Snowy Lane HOA. Prior to exam it was noted that one permit, 95-16181 covered 4 homes and the other permit, 95-16186 covered 3 homes. All of the homes were in the same general area and were taxlots that had been divided into 10 acre tracts. Each permit had a different well log attached and it would need to be determined during exam whether both wells were connected or if they were separated.

Field exam with Kirstin Darry from the homeowners association showed two wells serving 7 homes. Well D0059493 was equipped with a Franklin 5hp pump and well D0059415 was equipped with a Franklin 3hp pump. From the wells, the water was diverted into a 3,000 gallon cistern and then pumped to the homes. At time of the exam, Mrs. Darry was unsure if the wells were connected or not because they had just recently built their house. A phone call and email were sent to H2O Well Service where they confirmed the system was interconnected as both wells pumped to the cistern. They also provided a pump curves showing diversion rates for both wells as a measurement was not possible. Well D0059415 was capable of producing 11 gpm and D0059493 was capable of producing 24 gpm.

Because each permit only identified one well each, the diversion rate must be issued on the license for what they applied for. 95-16181 identified the well with the larger pump and license will be issued for a diversion rate of 0.05 cfs. 95-16186 identified the well with the smaller pump and license will be issued for a diversion rate of 0.02 cfs. An amendment will be sent out for both permits to identify both wells on each of the licenses and to properly show how the system runs.

License for 95-16181 will be issued for domestic use for 4 homes with irrigation up to ½ acre per home. Annual volume will be issued for 4.8 acre-feet. License for 95-16186 will be issued for domestic use for 3 homes with irrigation up to ½ acre per home. Annual volume will be issued for 3.6 acre-feet. It was discussed about how to issue these two licenses and what kind of shapes to attach to them. We could issue them with a shape attaching to 4 homes and 3 homes or issuing both licenses showing all 7 homes. It was decided to send out the amendment of permit showing all 7 homes on both licenses and amending the place of use of both of them to show all the QQ where water was served. Because both permits have the same priority date, there would never be an issue of delivering water if there was a time of shortage. Each file identifies the 4 homes and 3 homes that the permit was originally issued for.

Each license will be have condition X04 which will identify the number of homes that were applied for. Licenses will be limited by the annual volume in relation to the number of homes it serves. There will be no need for an overlap condition because between the two licenses the annual volume does not exceed the allowed usage. Each license will also have condition 070 which limits irrigation to ½ acre per home. Condition F06 will be added to show the relationship between to the wells and that they serve two licenses. Rathdrum Prairie conditions 174, 01R, and 175 will remain on license as well as 004.

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	01/01 to 12/31	0.02 CFS	3.6 AF
	<u>Totals:</u>	0.020 CFS	3.60 AF

2. Recommended Amendments

_____ Change P.D. as reflected above X Add P.D. as reflected above _____ None

_____ Change P.U. as reflected above X Add P.U. as reflected above _____ None

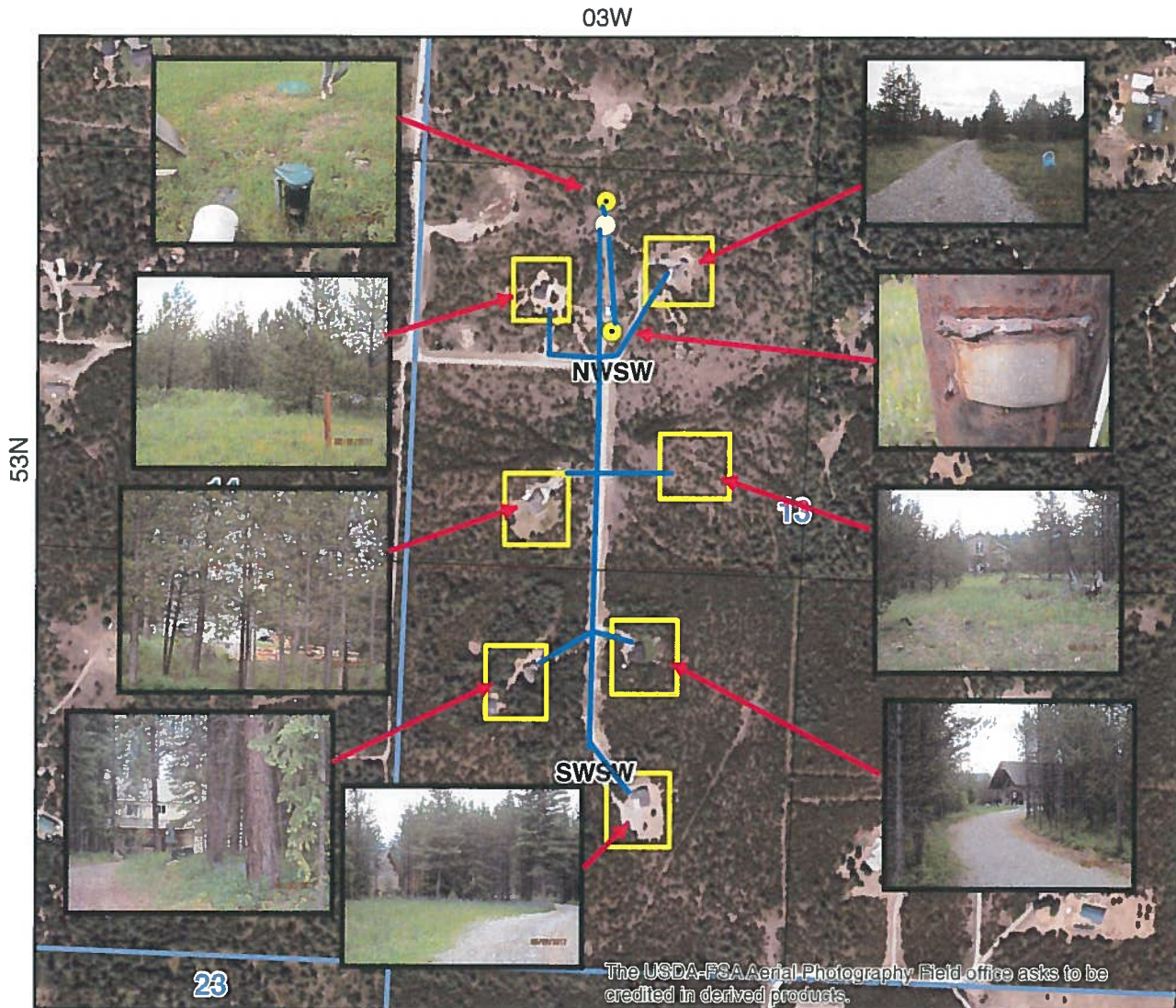
I. AUTHENTICATION

Field Examiner's Name Adam Fink Date 2-15-2018

Reviewer Douglas Jones P.E. Date 3/1/18

State of Idaho
Department of Water Resources
Attachment to Field Exam
95-16181 & 95-16186

DOMESTIC / SYSTEM DIAGRAM



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

0 0.075 0.15 0.3 Miles



IDAHO DEPARTMENT OF WATER RESOURCES WELL DRILLER'S REPORT

1. WELL TAG NO. D 0059415

Drilling Permit No. 861487
Water right or injection well # _____

2. OWNER

Name Timbered Ridge Custom Homes
Address 10063 Navion Drive
City Hayden State ID Zip 83835

3. WELL LOCATION:

Twp. 53 North ☒ or South ☐ Rge. 3 East ☐ or West ☒
Sec. 13 1/4 NW 1/4 SW 1/4
10 acres 40 acres 160 acres

Gov't Lot _____ County Kootenai
Lat. 47° 56.335 (Deg. and Decimal minutes)
Long. 116° 39.166 (Deg. and Decimal minutes)
Address of Well Site Redfir Road Well #1

City Athol
(Give at least name of road - Distance to Road or Landmark)
Lot _____ Blk. _____ Sub. Name _____

4. USE:

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

5. TYPE OF WORK check all that apply (Replacement etc.)

☒ New Well ☐ Replacement well ☐ Modify existing well
☐ Abandonment ☐ Other _____

6. DRILL METHOD:

☒ Air Rotary ☐ Mud Rotary ☐ Cable ☐ Other _____

7. SEALING PROCEDURES

Seal material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method/procedure
Bentonite	0	23	550 lbs	Dry Pour
Granular				

8. CASING/LINER:

Diameter (nominal)	From (ft)	To (ft)	Gauge/Schedule	Material	Casing	Liner	Threaded	Welded
6"	+2	421	.250	Steel	☒	☐	☐	☒
					☐	☐	☐	☐
					☐	☐	☐	☐

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) Ring bit @ 421

9. PERFORATIONS/SCREENS:

Perforations ☐ Y ☒ N Method _____
Manufactured screen ☐ Y ☒ N Type _____
Method of installation _____

From (ft)	To (ft)	Slot size	Number/ft	Diameter (nominal)	Material	Gauge or Schedule

Length of Headpipe _____ Length of Tailpipe _____
Packer ☐ Y ☒ N Type _____

10. FILTER PACK:

Filter Material	From (ft)	To (ft)	Quantity (lbs or ft ³)	Placement method

11. FLOWING ARTESIAN:

Flowing Artesian? ☐ Y ☒ N Artesian Pressure (PSIG) _____
Describe control device Steel Cap Welded

12. STATIC WATER LEVEL and WELL TESTS:

Depth first water encountered (ft) 395 Static water level (ft) 395
Water temp. (°F) _____ Bottom hole temp. (°F) _____
Describe access port 3/4" Plug

Well test:

Test method:

Drawdown (feet)	Discharge or yield (gpm)	Test duration (minutes)	Pump	Bailer	Air	Flowing artesian
100%	15	2 Hours	☐	☐	☒	☐

Water Quality test or comments: Clear, Cold, No Smell

13. LITHOLOGIC LOG and/or repairs or abandonment:

Bore Dia. (in)	From (ft)	To (ft)	Remarks, lithology or description of repairs or abandonment, water temp.	Water Y	N
12	0	1	Top soils		X
12	1	23	Sand and gravels coarse		X
8	23	205	Sand and gravels coarse		X
8	205	211	Boulder		X
8	211	273	Sand and gravel fine		X
8	273	275	Boulder		X
8	275	276	Clay gray		X
8	276	278	Boulder		X
8	278	348	Sand and gravels coarse		X
8	348	352	Boulder		X
8	352	385	Sand and gravel coarse		X
8	385	410	Cobbles with coarse sand & gravels	X	
8	410	421	Granite peach, green, white medium		X
5.5	421	500	Granite green, white, black medium		X

RECEIVED

AUG 04 2011

IDWR / NORTH
UNITED CROWN
PUMP & DRILLING

3125 W Hayden Ave. Hayden ID 83835
Office (800) 682-9641 (208) 773-7867

Completed Depth (Measurable) 500
Date: Started 7-13-11 Completed 7-19-11

14. DRILLER'S CERTIFICATION

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

Company Name United Crown Pump & Drilling Co. No. 636

*Principal Driller Jason Beckham Date 07-22-11

*Driller [Signature] Date 7-19-11

*Operator II _____ Date _____

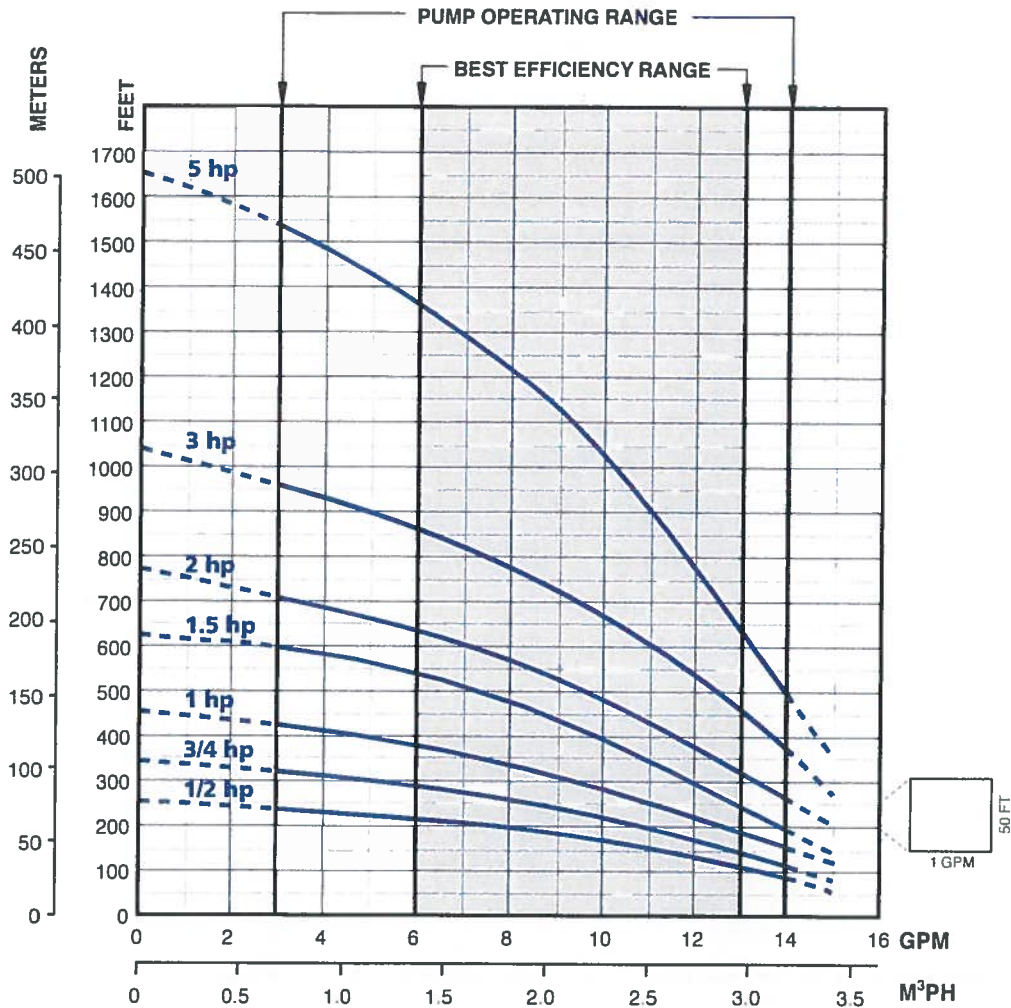
Operator I _____ Date _____

* Signature of Principal Driller and rig operator are required.

Submersible Pumps

4" Tri-Seal Pumps - 10 GPM

Well D0059415



Capacities in U.S. Gallons per Minute

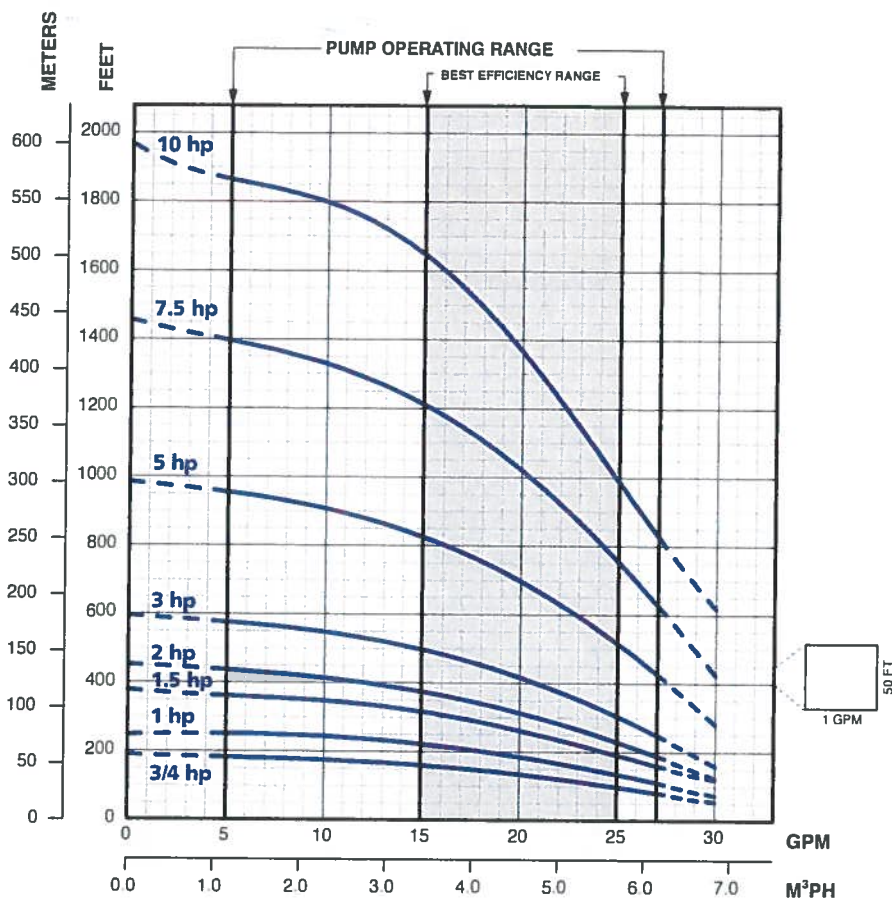
HP	PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance																	
		20	40	60	80	100	120	140	160	180	200	240	260	300	360	400	440	480	500
3	0														14	13	13	12	12
	20													14	13	13	12	12	11
	30												14	13	13	12	12	11	10
	40											14	13	13	12	12	11	9	7
	50									14	14	14	13	13	12	12	11	9	7
	60								14	14	14	13	13	12	12	11	11	10	9
	80							14	14	13	13	13	12	11	11	10	10	8	5
Shut-off PSI		438	430	421	413	404	395	387	378	369	361	343	335	317	291	274	257	240	231
5	0				14	13	13	12	11	11	10	9	8	6	5				
	20				14	13	12	12	11	10	9	8	7	6	4				
	30				14	13	12	12	11	10	9	8	7	5	4				
	40				14	13	12	11	11	10	9	8	7	5	3				
	50			14	13	13	12	11	10	9	9	7	6	5	3				
	60			14	13	13	12	11	10	9	8	7	6	4					
	80		14	14	13	12	11	11	10	9	8	7	5	3					
Shut-off PSI		670	626	583	540	497	453	410	367	324	280	237	194	151	107				

Notes: 1. Performance shown does not include friction loss in the drop pipe. 2. All performance data is based on rated motor nameplate voltage.

Submersible Pumps

4" Tri-Seal Pumps - 20 GPM

well D0059493



Capacities in U.S. Gallons per Minute

HP		PSI	Depth to Pumping Water Level (Lift) in Feet. Shaded Areas Indicate Most Efficient Performance																								
			20	40	60	80	100	120	140	160	180	200	240	260	300	360	400	440	480	500	600	700	800	900	1000		
5	0																			24	23	20	16			Shut-off 982 ft	
	20																			24	21	18	13				
	30																		24	23	20	17	11				
	40																	24	23	20	16	10					
	50																	24	22	22	17	15					
	60																	24	23	22	21	18	14				
	80																24	23	22	21	20	16	10				
Shut-off PSI			416	408	399	390	382	373	364	356	347	339	321	313	295	269	252	235	217	209	165	122	79				

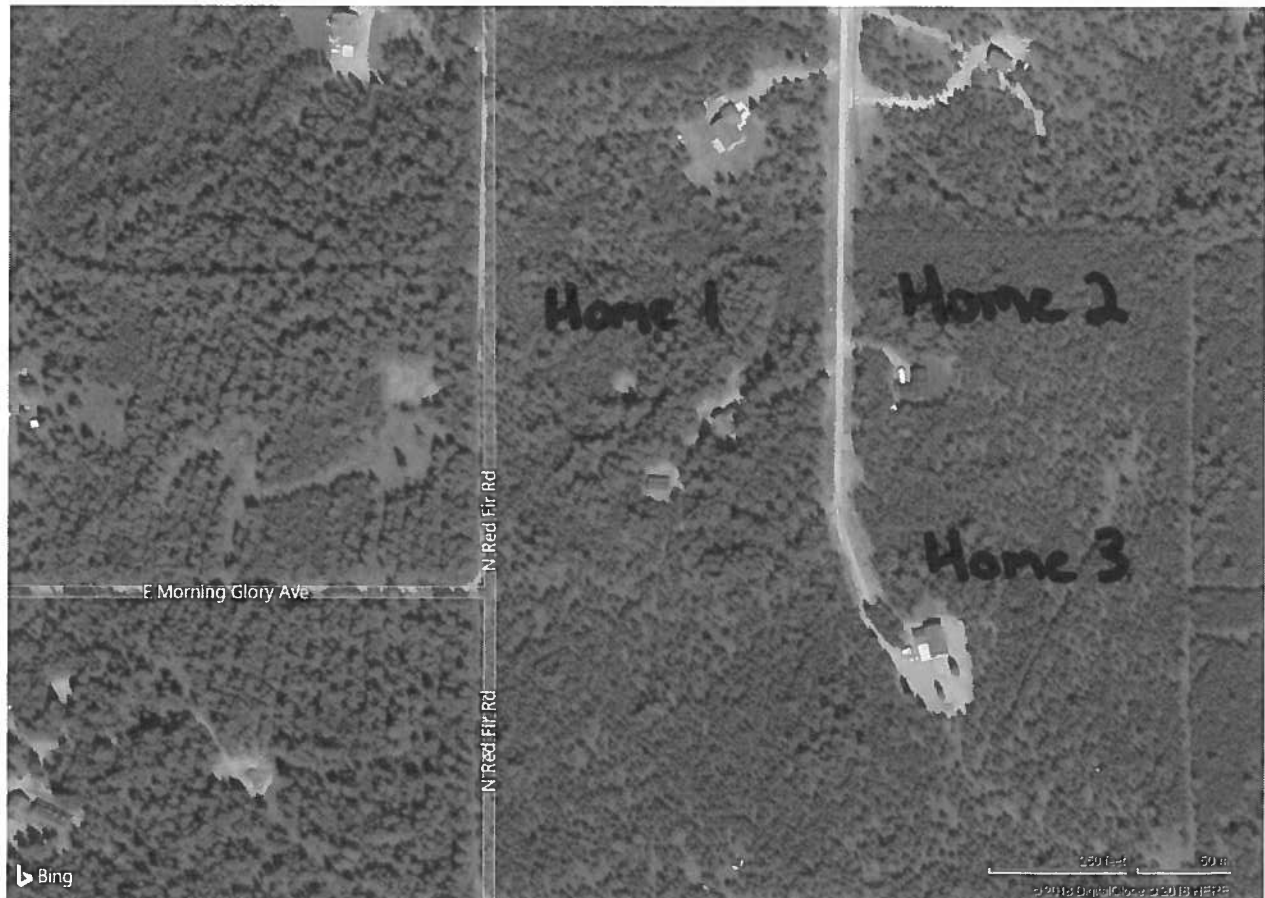
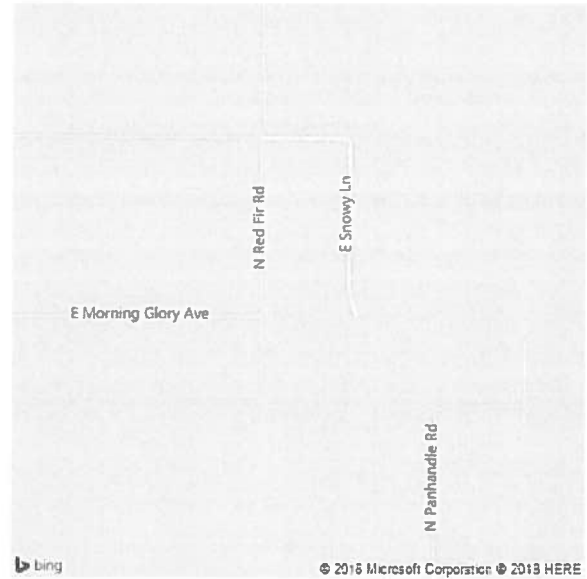
HP		PSI	440	480	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	
7.5	0					27	26	24	22	20	18	15	11	5						Shut-off 1456 ft
	20					27	25	23	22	19	17	14	9							
	30					26	25	23	21	19	16	13	7							
	40					26	24	23	21	18	16	12	6							
	50					27	26	24	22	20	18	15	11							
	60			27	27	25	24	22	20	17	14	9								
	80		27	26	26	24	23	21	19	16	12	6								
Shut-off PSI			440	423	414	371	327	284	241	197	154	111	68	24						

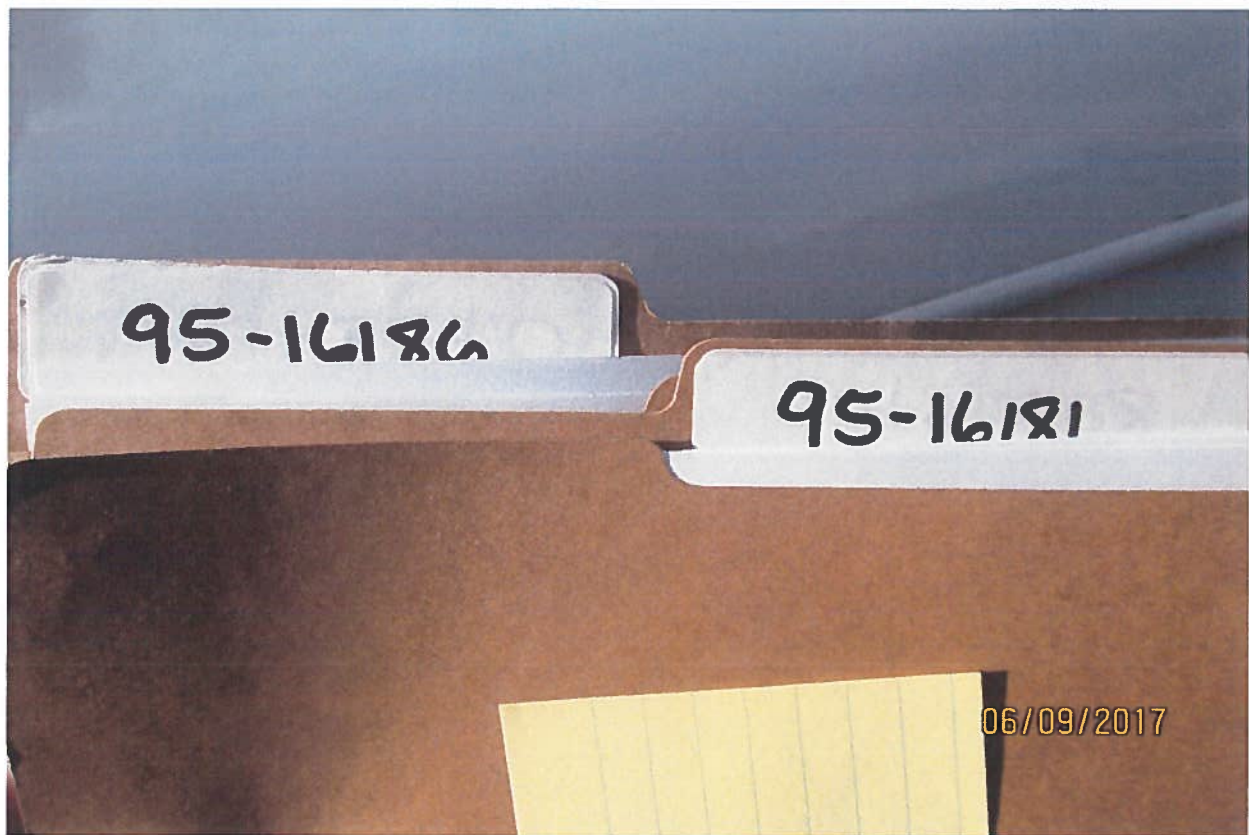
10	0							26	25	23	22	21	20	18	16	13	9		Shut-off 1968 ft
	20							27	25	24	23	22	20	19	17	15	12	7	
	30							27	25	24	23	21	20	19	17	14	11	6	
	40							26	25	23	22	21	20	18	16	14	10		
	50							27	26	24	23	22	21	20	18	16	13	8	
	60							27	26	24	23	22	21	19	18	15	12	7	
	80							26	25	24	22	21	20	19	17	14	10	5	
Shut-off PSI			662	644	636	592	549	506	462	419	376	333	289	246	203	159	116	73	

Notes: 1. Performance shown does not include friction loss in the drop pipe. 2. All performance data is based on rated motor nameplate voltage.

bing maps

Notes





Well D0059415, given IDWR tag A0015425.



Well D0059415.



Well D0059493, given IDWR tag A0015426



Well D0059493. 2-3k storage tank in upper portion of picture.



Pump control panel.



Home 1.



Home 2.



Home 3.