

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 61-7719

Exam Date: 2/14/2014

1. Current Owner: BENNETT MOUNTAIN NO 1 WATER USERS
1020 SCHMOLL RD
MOUNTAIN HOME ID 83647

2. Accompanied by:
Phone No:
Address:
Relationship to Permit Holder:

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

B. OVERLAP REVIEW

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

C. DIVERSION AND DELIVERY SYSTEM

1. LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER SE1/4SE1/4 Sec. 15, Twp 03S, Rge 06E, B.M.
ELMORE County

Method of Determination: GPS, ArcMap

2.

PLACE OF USE: IRRIGATION

[illegible]

Total Acres: 1.4

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 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>
306906	Franklin Electric	10	2822029310		

*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>

2. Measurements:

E. FLOW CALCULATIONS☒ Additional Computation Sheets Attached

Measured Method: Theoretical pump calculation based on 10 HP pump described by owner and 200 foot static water level noted on well report.

Theoretical flow calculation shows a system capacity of 0.20 CFS. Irrigation rate limited to 0.03 CFS/acre => 0.03 CFSx1.4 acres = 0.04 CFS.

Domestic = 0.11 CFS per Administrative memo # 22 (see chart) Total = 0.15 CFS, permit allowed 0.33 CFS

0.015 CFS per Department standards

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 1.4 \times 4 = 5.6 \text{ AF}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = 0.04 \times 214 \times 1.9835 = 17 \text{ AF}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 5.6$$

2. Volume Calculations for Other Uses: Domestic use = 0.6 AF/home per administrative memo # 22
 $\Rightarrow 5 \text{ homes} \times 0.6 = 3 \text{ AF}$

G. NARRATIVE/REMARKS/COMMENTS

Water permit allowed up to 15 homes, two points of diversion and 7.5 acres of irrigation. Field exam reveals that only 5 homes have been connected to the well, only one well was drilled, aerial photos indicate total irrigated acreage is 1.4 and system operator indicates there have never been surface water shares available to the subdivision. System operator indicates no other homes are or will be added to the system. Based on Administrators Memo # 22 the water requirement for 5 homes is 0.11 CFS and Department standards allows for 0.03 CFS/per acre for irrigation of less than five acres. Therefore, 1.4 acres $\times$ 0.03 CFS = 0.042 CFS for irrigation and 0.11 CFS for domestic purposes provide for a total diversion rate of 0.15 cfs. Theoretical pump calculations (attached) indicate the system is capable of 0.20 CFS average flow rate. Recommend licensing for 0.15 CFS

System operator indicated during the field exam that mail should be addressed to Kyle Perkins, Bennett Mountain No. 1 Water users Association, 1020 NW Schmoll RD, Mountain Home, ID 83647.

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>
IRRIGATION	04/01 to 10/31	0.040 CFS	5.6 AF
DOMESTIC	01/01 to 12/31	0.110 CFS	
<u>Totals:</u>		0.150 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

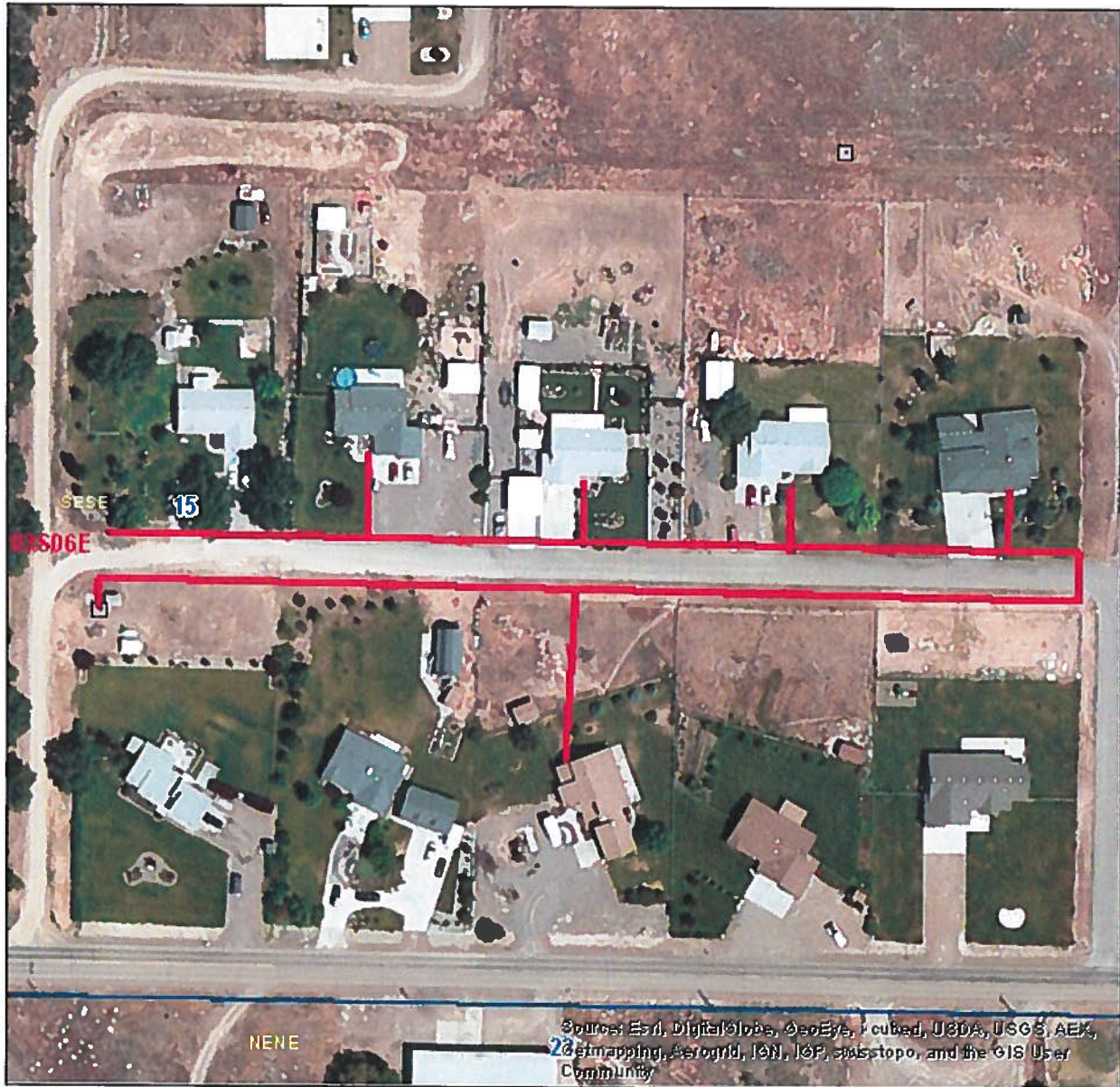
I. AUTHENTICATION

Field Examiner's Name Gina D. Hawley Date 3-5-14
 Reviewer Daniel A. Mohr Date 3-7-14

Water Right 61-7719

Bennett Mountain No. 1 Water Users Association

System Diagram



— Buried pipeline from pump to houses served by the system

THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 61-7719
 Examiner: CF Hersley
 Date of Field Exam: 2/18/2014

	Option 1	OPTION 2	OPTION 3	
P/D No.:				
PUMP HORSEPOWER	10	10	10	
BOOSTER HORSEPOWER	0	0	0	
PUMPING LEVEL	200	200	200	
DISCHARGE PRESSURE	40	50	60	
FRICITION	0	0	0	
RATE OF FLOW (cfs)	0.21	0.20	0.18	AVE
(gpm)	94.6	87.6	81.7	0.20

The above calculates the formula =

$$Q = \frac{8.8 * (\text{Efficiency}) * \text{hp}}{\text{depth to water} + 2.31 * (\text{psi}) + \text{friction}}$$

Assumptions: %70 efficiency.

Examiners Notes:

A standard psi for domestic use of 40 to 60 psi was used to estimate the pressure against the pump.

IDAHO DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPORT 63387

Use Typewriter
or
Ball Point Pen1. DRILLING PERMIT NO. 61-95-W-0008-000
Other IDWR No. _____

2. OWNER:

Name Rick Schmoll
Address 2490 Sunset Strip
City Mountain Home State ID Zip 83647

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

N	
W	E
S	

Twp. 3 North ☐ or South ☒
Rge. 6 East ☒ or West ☐
Sec. 15 SE 1/4 SE 1/4 1/4
Gov't Lot _____ County Elmore 10 acres 40 acres 160 acres

Address of Well Site McMurtrey
City Mtn Home

(Give at least name of road + Distance to Road or Landmark)

Lt. _____ Blk. _____ Sub. Name Bennett
Mtn #1

4. PROPOSED USE:

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

5. TYPE OF WORK

☒ New Well ☐ Modify or Repair ☐ Replacement ☐ Abandonment

6. DRILL METHOD

☐ Mud Rotary ☒ Air Rotary ☐ Cable ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT Sacks or Pounds	METHOD
Material	From	To		
Bentonite	0	105	22	Overbore

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) _____
Was drive shoe seal tested? ☒ Y ☐ N How? Air

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
8 5/8 +2	105	.250	Steel	☒	☐	☒	☐	☐
				☐	☐	☐	☐	☐
				☐	☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS

☐ Perforations Method _____
☒ Screens Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						☐	☐
						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:

200 ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control devices: _____

11. WELL TESTS:

☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
50			

Water Temp. _____ Bottom hole temp. _____

Water Quality test or comments: _____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Water

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
12	0	1	Topsoil		
12	1	14	Sand and Gravel		
12	14	20	Gray Lava		
12	20	22	Broken gray Lava		
12	22	23	Gray Lava		
12	23	25	Gray Lava		
12	25	48	Gray Lava		
12	48	88	Reddish Brown Lava & Cinders		
12	88	100	Sand & Gravel		
12	100	102	Broken Gray Lava		
12	102	103	Void		
12	103	105	Gray Lava		
8	105	135	Gray Lava		
8	135	137	Void		
8	137	218	Gray Lava		
8	218	224	Brown Cinders		
8	224	287	Gray Lava		
8	287	325	Black Lava & Cinders	X	
8	325	360	Gray Lava		
8	360	365	Brown Cinders	X	
8	365	417	Gray Lava		
8	417	438	Brown Lava & Cinders	X	
8	438	473	Gray Lava		
8	473	483	Red Cinders	X	
8	483	488	Gray Lava		

RECEIVED

MAR 07 1996

FEB 24 1995

WATER RESOURCES
WESTERN REGIONCompleted Depth 488 (Measurable)
Date: Started 2-17-95 Completed 2-22-95

13. DRILLER'S CERTIFICATION

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

Firm Name Hiddleston & Son, Inc. Firm No. 35Firm Official _____ Date _____
and
Supervisor or Operator Matt Hiddleston Date _____
(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

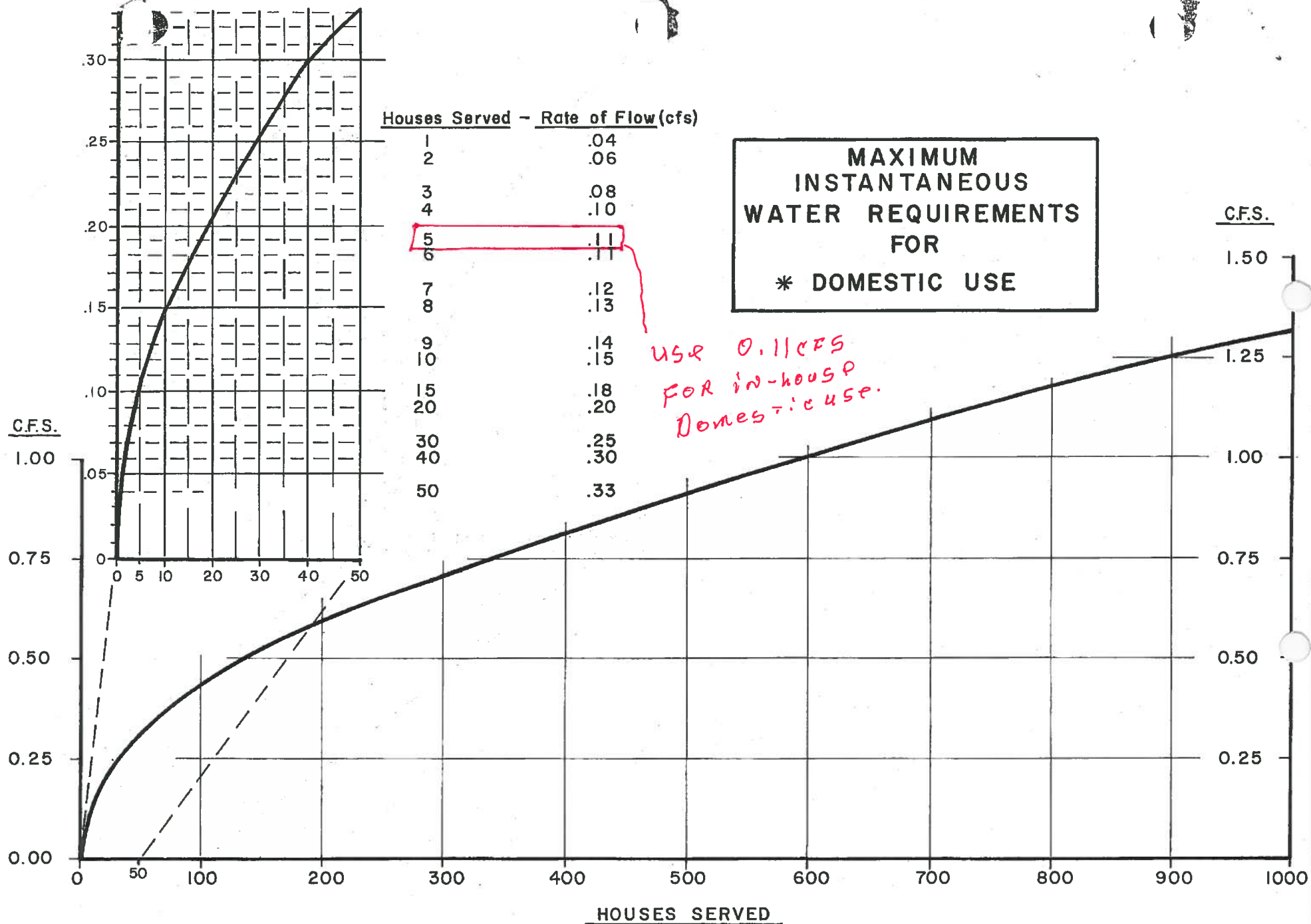


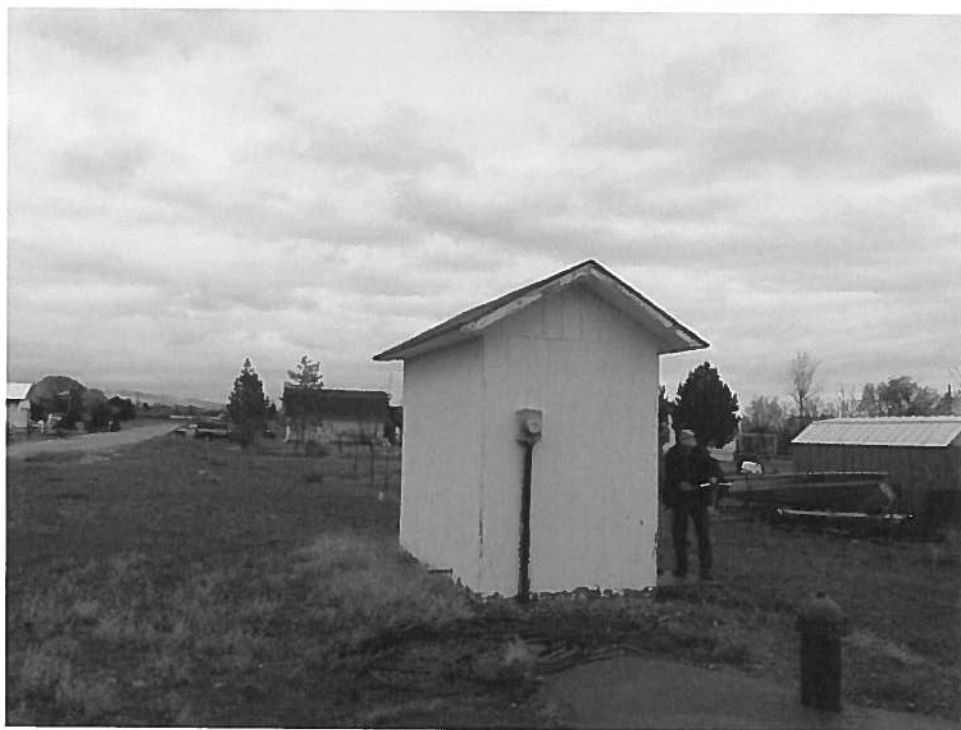
FIG. 1.

* From Community Water Systems Source Book, J. Ameen, 1977, Technical Proceedings, North Carolina.)

Water Right 66-7719, Bennett Mountain No. 1 Water Users Association



Well Head



Well House

Water Right 66-7719, Bennett Mountain No. 1 Water Users Association

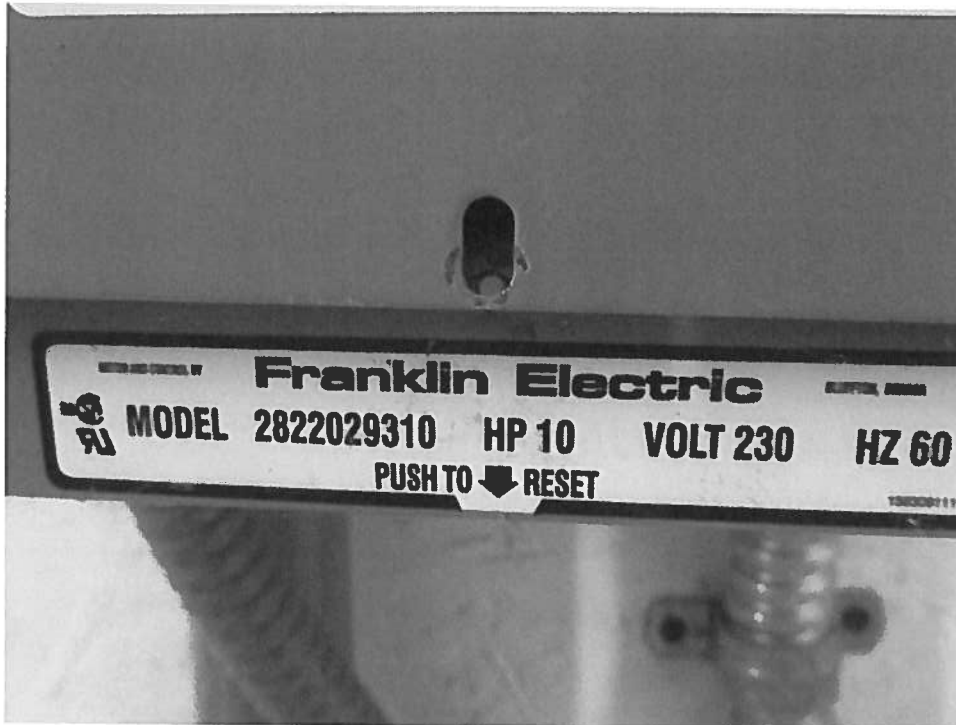


Pressure tanks and plumbing

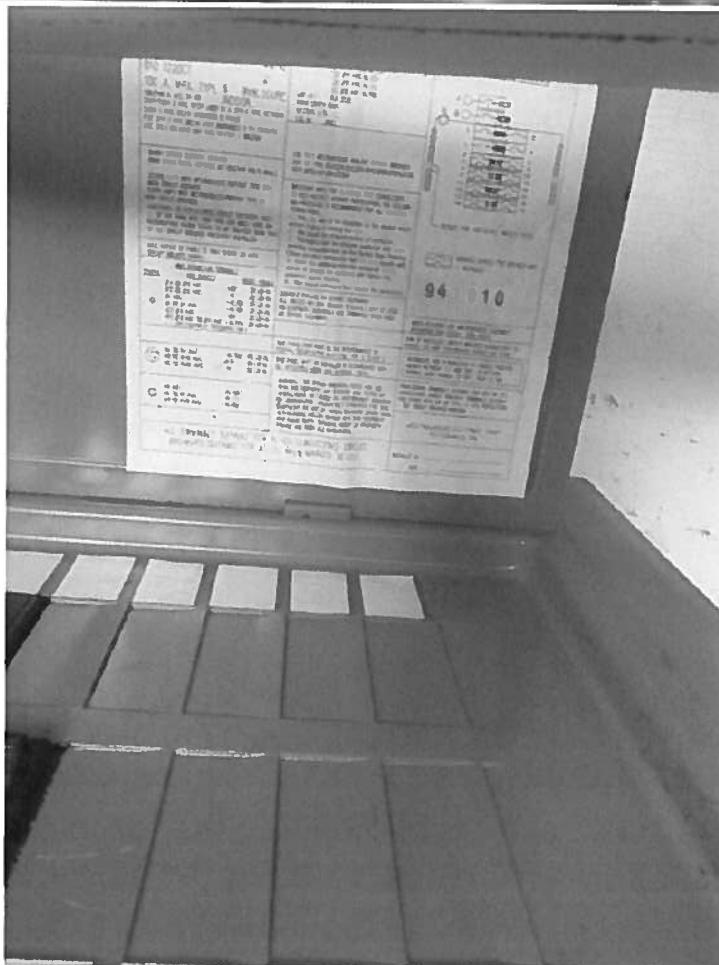


Pressure tanks and plumbing

Water Right 66-7719, Bennett Mountain No. 1 Water Users Association



Well Head



Pump electrical panel

Water Right 66-7719, Bennett Mountain No. 1 Water Users Association



Looking east from point of diversion, piping on the north side and south side of the street running east-west.

Process	Basin Sequence	Draft	Owner	Source	POD/ POU	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE	Total Acres
Water Right	61-10125	N	KOCH, KENNETH H	GROUND WATER	POD	Different parcel															X	0
Water Right	61-10125	N	KOCH, KENNETH H	GROUND WATER	POU	Different parcel															X	0
Water Right	61-10128	N	FISHER, PHILLIP RICHARD; FISHER,	GROUND WATER	POD	Different parcel															X	0
Water Right	61-10128	N	FISHER, PHILLIP RICHARD; FISHER,	GROUND WATER	POU	Different parcel															X	0
Water Right	61-7285	N	ECKERT, GARTH G	GROUND WATER	POD	Different parcel															X	0
Water Right	61-7285	N	ECKERT, GARTH G	GROUND WATER	POU	Different parcel															X	0
Water Permit	61-7719	N	BENNETT MOUNTAIN NO 1 WATER	GROUND WATER	POD																X	0
Water Permit	61-7719	N	BENNETT MOUNTAIN NO 1 WATER	GROUND WATER	POU																7.5	7.5
Water Right	63-19893	N	MOUNTAIN HOME IRRIGATION DISTRICT	LITTLE CAMAS CREEK	POU	X	X	X	X	X	X	X	X	X	X			X	X	X	X	0
Water Right	63-20139	N	MOUNTAIN HOME IRRIGATION DISTRICT	LITTLE CAMAS CREEK	POU	X	X	X	X	X	X	X	X	X	X			X	X	X	X	0
Water Right	63-2188	N	MOUNTAIN HOME IRRIGATION DISTRICT	CAT CREEK	POU	X	X	X	X	X	X	X	X	X	X			X	X	X	X	0
Water Right	63-2214	N	MOUNTAIN HOME IRRIGATION DISTRICT	CAT CREEK	POU	X	X	X	X	X	X	X	X	X	X			X	X	X	X	0
Water Right	61-10417	N	MOUNTAIN HOME IRRIGATION DISTRICT	CANYON CREEK	POU	X	X	X	X	X	X	X	X	X	X			X	X	X	X	0
Water Right	61-10419	N	MOUNTAIN HOME IRRIGATION DISTRICT	CANYON CREEK	POU	X	X	X	X	X	X	X	X	X	X			X	X	X	X	0
Water Right	61-10421	N	MOUNTAIN HOME IRRIGATION DISTRICT	CANYON CREEK, RATTLESNAKE CREEK	POU	X	X	X	X	X	X	X	X	X	X			X	X	X	X	0
Water Right	61-263	N	MOUNTAIN HOME IRRIGATION DISTRICT	CANYON CREEK	POU	X	X	X	X	X	X	X	X	X	X			X	X	X	X	0
Water Right	61-264	N	MOUNTAIN HOME IRRIGATION DISTRICT	CANYON CREEK	POU	X	X	X	X	X	X	X	X	X	X			X	X	X	X	0

Process	Basin Sequence	Draft	Owner	Source	POD/ POU	NENE	NWNE	SWNE	SENE	NENW	NWNW	SWNW	SENW	NESW	NWSW	SWSW	SESW	NESE	NWSE	SWSE	SESE	Total Acres
Water Right	61-266	N	MOUNTAIN HOME IRRIGATION DISTRICT	CANYON CREEK	POU	X		X	X	X	X	X	X	X	X			X	X	X	X	0
Water Right	61-363	N	MOUNTAIN HOME IRRIGATION DISTRICT	LONG TOM CREEK	POU	X		X	X	X	X	X	X	X	X			X	X	X	X	0