

[illegible]

Method of Determination: Arc Map (Aerial Photo); Tax Lots.

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>
D0022539	_Pentek_	_3_	04F18-17-1065_	_Sta-Rite_	_021J04L;_2" _
D0022539	_Pentek_	_3/4_	02L18-08-1174_	_Sta-Rite_	_1A03C;_2" _
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

*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>
N/A	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

2. Measurements: No field measurement. Water systems operating pressure controlled by pressure tanks.

E. FLOW CALCULATIONS

_____Additional Computation Sheets Attached

Measured Method: (Theoretical Horsepower Equation)

$$Q = 8.8 \times 0.7 \times 3.75/95 + (2.31 \times 30) = 23.1/164.3 = 0.14 \text{ cfs}$$

$$Q(\text{theoretical}) = 0.14 \text{ cfs} < 0.23 \text{ cfs } Q(\text{permit})$$

$$HP = 3 + \frac{3}{4} = 3.75$$

$$Z = 95' \text{ (Average for both pumps)}$$

$$P = 30 \text{ psi}$$

Appears that the current pumping systems cannot attain the permit diversion rate of 0.23 cfs.

Recommend the pumping systems theoretical capacity of 0.14 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: N/A

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

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

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

2. Volume Calculations for Other Uses: (Domestic & Industrial)

Domestic: 4 fixtures @ 1.1 gpm = 4.4 gpm x 30 min/day x 5 day/week x 52 weeks = 34,320 gallons ~ 35,000 gallons

$$V_r = 35,000 \text{ gallons} / 325,850 \text{ gallons/AF} = 0.10 \text{ AFA}$$

Industrial: 4,000 gallons/day x 60 days = 240,000 gallons – Dust Control & Road Base

2,000 gallons/day x 6 days = 12,000 gallons – Weed Control Spray Trucks

$$V_r = 252,000 \text{ gallons} / 325,850 \text{ gallons/AFA} = 0.80 \text{ AFA}$$

$$V_d = 0.14 \text{ cfs} \times 365 \times 1.9835 = 101.4 \text{ AFA}$$

$$V_r = 0.90 < V_d = 101.4 \text{ AFA}$$

$$V = 0.90 \text{ AFA}$$

G. NARRATIVE/REMARKS/COMMENTS

Two (2) submersible pumps in a ground water well, divert water to a shop for domestic use, and to the roadway maintenance and solid waste transfer site facilities for industrial use.

Domestic Use:

A ¾-hp submersible pump diverts ground water thru a 2" PVC main line to a shop building for domestic use. The domestic use facilities include a toilet, two (2) sinks, and a shower. Two frost-free hydrants, which are located at each end of the shop building, are used to wash county roadway vehicles.

Industrial Use:

A 3-hp submersible pump diverts ground water thru a 2" PVC main line to a 10,000 gallon fiberglass water storage tank, a weed vehicle filling station, and the solid waste transfer site. A 6' diameter CMP pressure tank vault, located next to the water storage tank, maintains water pressure to the roadway maintenance facilities and a frost-free hydrant to provide fire protection capabilities to the solid waste transfer site.

The roadway maintenance facilities include a 10,000 gallon fiberglass water storage tank and a weed vehicle filling station. The water from the water storage tank is used primarily for dust control of the county roadways. The weed vehicle filling station is used to fill tanks for spraying weeds within the county road right-of-ways.

OVERLAP ANALYSIS:

Point of Diversion: There are no point of diversion overlaps for Water Right Permit No. 67-14303.

Place of Use: There are no place of use overlaps for Water Right Permit No. 67-14303.

Have conditions of permit approval been met? ☒ Yes ☐ No

RATE &/OR STORAGE RECOMMENDED FOR LICENSING

Description	Rate of Flow (cfs)		Storage (af)
Permit Amount	0.23	&/or	N/A
Beneficial Use Limit	0.23	&/or	N/A
System Measurement	0.14(theoretical)	&/or	N/A
Proof Fee Amount	1.00	&/or	N/A
Recommended Amount	0.14	&/or	N/A

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	0.040 CFS	0.10 AFA
INDUSTRIAL	01/01 to 12/31	0.100 CFS	0.80 AFA
<u>Totals:</u>		0.140 CFS	0.90 AFA

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

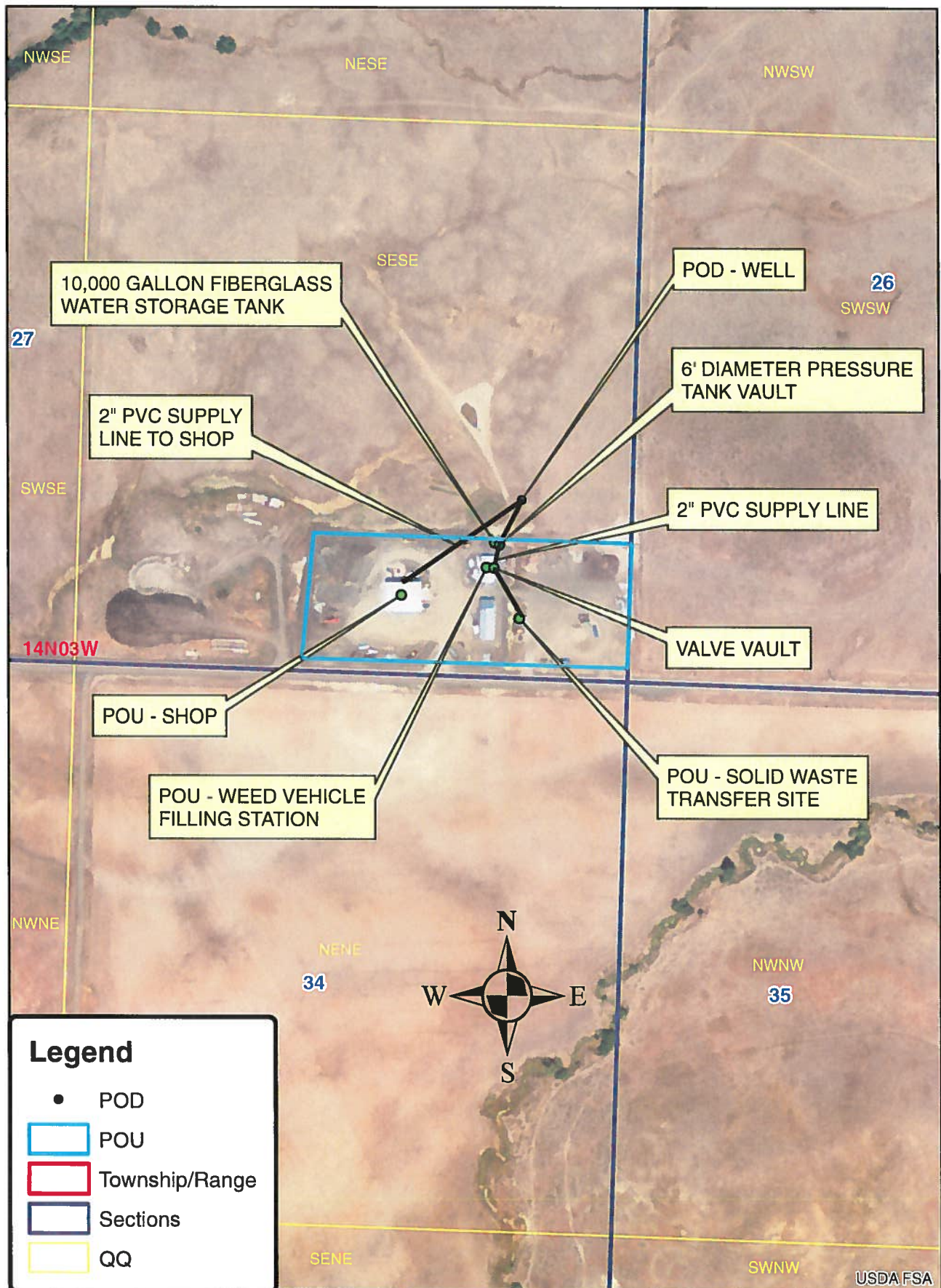
I. AUTHENTICATION

Field Examiner's Name Rick Collingwood Date 2/7/14

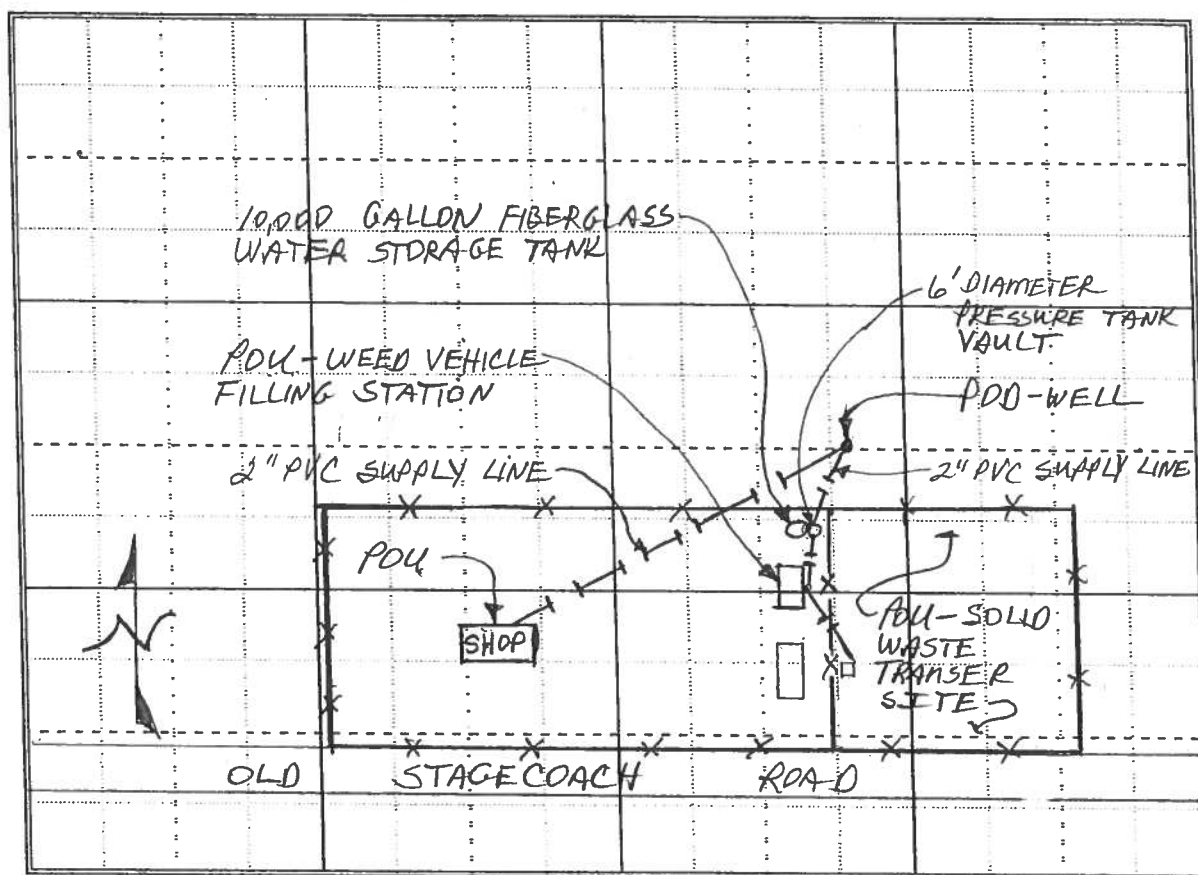
Reviewer _____ Date _____

67-14303

ESRI AERIAL PHOTO - 2012



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" = NTS

- ☐ 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

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

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

1. WELL TAG NO. D 0025223
 DRILLING PERMIT NO. _____
 Other IDWR No. _____

2. OWNER:
 Name Washington County
 Address 1102 East Court St
 City Welsh State Id Zip 83672

3. LOCATION OF WELL by legal description:

Sketch map location must agree with written location.

N		Twp. <u>14</u>		North ☒ or South ☐	
W		Rge. <u>3</u>		East ☐ or West ☒	
E		Sec. <u>27</u>		1/4 <u>SE</u> 1/4 <u>SE</u> 1/4	
S		Gov't Lot _____		10 acres 40 acres 160 acres	
		Lat: _____		Long: _____	
		Address of Well Site <u>Norway - East</u>			
		<u>OF 95 ON STATE COACH</u> City <u>Midvale</u>			
(Give at least name of road + Distance to Road or Landmark)					

Lt. _____ Blk. _____ Sub. Name _____

4. USE:

☒ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other water truck

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

☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD

☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT		METHOD
Material	From	To	Sacks or Pounds		
Bentonite	0	25	50		pour
Clay	25	39	500 lbs		slough
Bentonite	39	54	5		pour

Was drive shoe used? ☒ N Shoe Depth(s) 122.5
 Was drive shoe seal tested? ☒ Y ☐ N How? visually

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
8	41.5	122.5	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:

25 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
100+	N/A	120	3 hrs

Water Temp. 60+ Bottom hole temp. 60+

Water Quality test or comments: None

Depth first Water Encounter 17

12. LITHOLOGIC LOG: (Describe repairs or abandonment) Water

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
20	0	2	Clayey top soil		☒
20	2	5	Clayey Soil - Clay		☒
20	5	8	Rocky & sandy clay		☒
15	8	24	sandy clay & clay	☒	
15	34	39	Brown sandy clay		☒
10	39	127	Brown-Blue sandy clay		☒
8	127	140	Black Basalt	☒	☒
8	140	141	Broken	☒	
8	141	153	Black Basalt		☒
	153	153.5	Broken	☒	
	153.5	158	Black Basalt		☒
	158	159	Broken	☒	
8	159	165	Black Basalt		☒
	165	166	Broken	☒	
	166	170	Black Basalt		☒
	170	171	Broken	☒	
	171	182	Black Basalt		☒
	182	184	Broken	☒	
	184	191	Black Basalt		☒
	191	207	Red-Brown fine Basalt	☒	
	207	209	Cinders	☒	
8	209	226	Black Basalt		☒
8	226	228	Cinders	☒	

RECEIVED

JUL 16 2002

WATER RESOURCES
WESTERN REGION

Completed Depth 200 (Measurable)
 Date: Started 6-27-02 Completed 7-11-02

13. DRILLER'S CERTIFICATION

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

Company Name Rob Dawson, Inc Firm No. 589

Firm Official [Signature] Date 7-13-02

and

Driller or Operator _____ Date _____

(Sign once if Firm Official & Operator)

FIELD EXAM PHOTOS

Water Right Permit: 67-14303

Field Exam Date: 9-24-13

PLS: SE1/4, SE1/4 Section 27, T.14N, R.03W

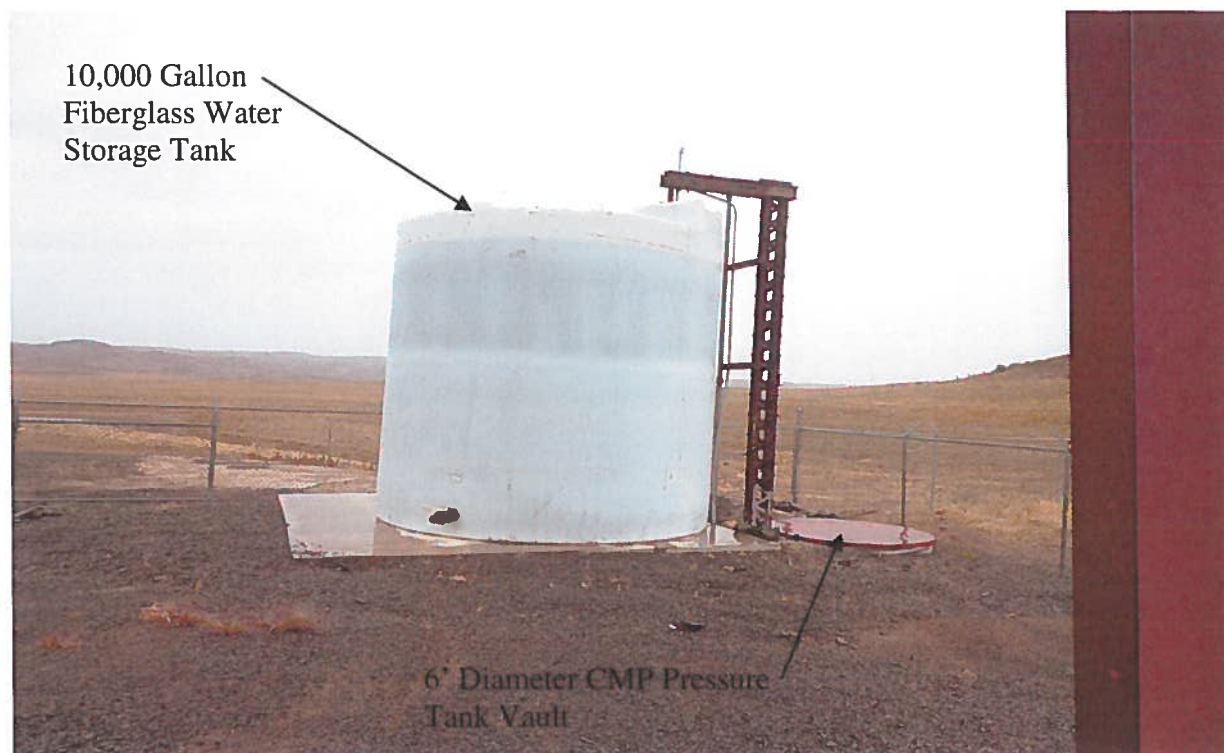
Field Examiner: RC



Point of Diversion: View of the ground water well. Two submersible pumps are located in the well. One $\frac{3}{4}$ -hp pump provides water to the shop for domestic use. The second is a 3-hp pump which provides water for industrial use.



Place of Use: View westerly of the shop where ground water is provided for domestic use.



Place of Use: View northerly of a 10,000 gallon Fiberglass water storage tank. A 50 gallon pressure tank is located in a 6' CMP vault next to the water storage tank. The well is located northerly of the water storage tank and the cyclone fence.



Place of Use: View southerly of weed department tank filling station. The orange structure outside the enclosure is a valve vault. The vault contains valves to control flows to the weed tank filling station and the solid waste transfer station.



Place of Use: View southeasterly of the solid waste transfer site. Water is pumped to a frost-free hydrant near the structure fire protection.