

# **Shoshone-Paiute Tribes of the Duck Valley Reservation**

## **Public Water System Consumer Confidence Report**



### ***Prepared by:***

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### ***Date:***

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# Duck Valley Public Water System Consumer Confidence Report Calendar Year 2014

## INTRODUCTION

This report was developed by the Shoshone-Paiute Tribal Water & Sanitation Department. The report is about the community drinking water program for the calendar year shown above. The report is required by the Safe Drinking Water Act (SDWA: 1996) and follows the guidelines OF THE U.S. Environmental Protection Agency (USEPA) for report content and distribution.

The report contains information on your source water, the levels of any detected contaminants, and compliance with drinking water rules and regulations. The rationale for the report is that consumers have the right to know what is in their drinking water and where that water comes from. Every community water system that serves at least 15 service connections, serving year round residents, is required to develop and distribute the report.

### Water System Information

The community water supply serving the towns of Owyhee, Newtown and Thomas Loop are under the supervision of the Shoshone-Paiute Tribes Water and Sanitation Department (“Department”). The Department is directed by Nathan Bacon and operator Wilford Thomas who can be reached at (208) 759-3100, ext. 1208. Mr. Bacon is available to answer any questions regarding this report.

No public participation activities are incorporated into the Department. No non-English speaking person/s are known to live in the community. Native American members of the community are primarily bi-lingual with English as the second language amongst the older generation and Shoshone or Paiute as the second language amongst the majority of the younger population.

### Sources of Water

The Duck Valley Community System is served by two separate water systems: the Owyhee Well # 3 and Well # 2 (feeding the town of Owyhee and along Hwy. 225 to the Rodeo Ground turn). Newtown Well #1 and Well #2 (feeding the Newtown area, Thomas Loop and Hwy. 51) with Newtown Well #3 as backup. See Map for well locations.

Each system operates separately; however, a solenoid valve can be opened to provide water to the Newtown system from the Owyhee system.

In summary, the Owyhee system begins at the south end of town and ends at the rodeo grounds. The Newtown system begins at the rodeo grounds turn-off and ends at the Thomas Loop Sub-Division. Pumps bring the water out of the ground, which is then stored in water tanks for later distribution. Water is distributed under pressure through a distribution system network of buried pipes. Smaller pipes, called service lines, are attached to the main lines to bring water to your house. In our community system, water pressure is provided by pumping water into a storage tank at elevations that are higher than the homes. The force of gravity “pushes” the water into your home and is readily available at the tap. In the future, meters will be used to measure usage on your service line for more accurate billing.

### Definitions

This report makes use of certain terms that are difficult to understand without an explanation. Therefore, the following definitions may assist you in understanding the report.

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCL’s are set closest to the MCLG as feasible using the best available treatment technology.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there are no known or expected risk to health. MCLG’s allow a margin of safety.

**Maximum Detection Limit (MDL):** The level at which the analytical laboratory will report a contaminant in drinking water.

**Non-Detection or Non-Detects (ND):** Laboratory analysis that indicates that a constituent is not present.

**Parts per million (ppm) and milligrams per liter (mg/L):** one part per million corresponds to a minute in two years or a single penny in \$10,000.

**Parts per billion or micrograms per liter (mg/L):** One part per liter corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**Parts per trillion or nanograms per liter (nanograms/L):** One part per trillion corresponds to one minute in 2,000,000 years or a single penny in \$10,000,000,000.

**Picocuries per liter (pCi/L):** Picocuries per liter is a measure of radioactivity in water.

**Millirems per year (mrem/yr):** Measures of radioactivity absorbed by the body.

**Million fibers per liter (MLF):** Measures the presence of asbestos fibers that are longer than 10 micrometers.

**Nephelometric Turbidity Units (NTU):** This is a measurement of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**Regulatory Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

**Treatment technique (TT):** A required process to reduce the level of a contaminant in drinking water.

**Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water supply must follow.

**Variations or Exemptions:** EPA permission not to meet an MCL, a treatment technique, or a reporting requirement under certain conditions.

## DETECTED CONTAMINANTS

*No harmful contaminants were detected in the water sampled from the Newtown and Owyhee drinking water wells.* The test results from the three water wells shows that *Both Community Water Systems is of clean, excellent water quality.*

Drinking water samples taken from the community supplies and analyzed by a certified laboratory indicate that contaminants were not detected in the water supply. The table that follows this report reveals the contaminants that were analyzed throughout year 2014.

What about contamination for Rio Tinto and BIA contaminated groundwater in the town of Owyhee?

*No contamination associated with Rio Tinto or the former BIA groundwater contamination was found in the water quality tests.* It is noted that hydrocarbons, including gasoline and heating oil, contaminated groundwater in the Town of Owyhee. The contamination forced the closure of one well in the town of Owyhee. This well is no longer used. The wells on the Map do not show any levels of contamination.

The Bureau of Indian Affairs has cleaned-up much of the contamination in the town of Owyhee. More clean-up work will be occurring in the following years. *Monitoring performed by the program ensures that no harmful contaminants are in the water supply.*

In addition to contaminants that may have come from the abovementioned sources, the Water and Sanitation Department monitors for other contaminants. We are required to monitor for microbial contaminants like coliform, E. coli, and Cryptosporidium on a monthly basis. The table at the end of the report illustrates the sampling frequency for potential contaminants.

## WATER QUALITY DATA TABLE

The table at the end of the report lists all of the drinking water contaminants that we sampled during the calendar year. *The presence of contaminants in the drinking water was below the MCL Level and is reported as ND in the table.* The presence of contaminants in the water does not necessarily indicate that the water poses a health threat.

USEPA does not require us to monitor for certain contaminants less than once per year because the concentration of the contaminants do not change frequently.

Why Contaminants are in Drinking Water?

*No harmful contaminants were detected in the water sampled from the drinking water wells.*

Drinking water, including bottled water purchased at the store, may reasonably be expected to contain at least small amounts of contaminants. *The presence of contaminants does not necessarily indicate that water poses a health risk.* More information about contaminants and potential health risks can be obtained by calling the USEPA Safe Drinking Water Hotlines (1-800-426-4791).

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the earth, or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activities.

***Some people may be more sensitive to contaminants in drinking water than the general population.*** Immuno-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have had an organ transplant, persons with HIV/AIDS, or other immune system disorders, some elderly, and infants can be particularly at risk from infections. ***These people should seek the advice of health care providers about drinking the water.*** EPA/CDC guidelines on appropriate means to lessen the risk of infections by microbial contaminants, including *Cryptosporidium*, are available from the Safe Drinking Water Hotline (1-800-426-4791).

Contaminants that can be present in water sources include:

- Microbial contaminants, such as viruses and bacteria that may have come from treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides that may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical constituents, including synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants can be naturally occurring or the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants provided through public water supplies. The Food and Drug Administration (FDA) also establishes regulations that limit contaminants in bottled water, which must provide the same protections for public health.

***A detected contaminant is any contaminant detected at or above the MCL.*** The table at the end of this report is provided to reflect if, or if not, that contaminants have been detected in your drinking water. ***The table also indicates that contaminants have not been detected in any levels at or above the MDL.***

#### **OTHER RELEVANT INFORMATION**

The following information may be helpful to you to get in touch with the USEPA.

***USEPA Hotline Telephone Number:***

1-800-426-4791

***USEPA Drinking Water Website:***

[www.epa.gov/safewater/](http://www.epa.gov/safewater/)

**SHOSHONE-PAIUTE TRIBES OF THE  
DUCK VALLEY RESERVATION**

**WATER & SANITATION PROGRAM  
CONSUMER CONFIDENCE REPORT  
Calendar Year 2014**

SUBSTANCE	MCLG	MCL	MDL	Sampling Frequency	Level Detected (ug/L)			Sampling Period	Comments
					Owyhee Well #3	Newtown Well #1	Newtown Well #2		
<b>Microbiological Contaminants</b>									
Total coliform (ppm)	0	5%	0	Monthly	1	2	ND	2014	See Attached
E Coli (ppm)	0	5%	0	Monthly	ND	ND	ND	2014	
<b>Water Clarity</b>									
Turbidity	n/a	TT	n/a	TT	ND	ND	ND	2014	
<b>Radioactive Contaminants</b>									
Belapholon Emitters	0	4	0	As Required	ND	ND	ND	2014	
Alpha Emitters (pCi/L)		15	0	As Required	ND	ND	ND	2014	
Combined Radium (pCi/L)	0	5	0	As Required	ND	ND	ND	2014	
<b>Inorganic Contaminants</b>									
Antimony (ppb)	6	6	5	As Required	NS	NS	NS	2014	
Arsenic (ppb)	-	50	3	As Required	NS	NS	NS	2014	
Barium (ppb)	2,000	2,000	50	As Required	NS	NS	NS	2014	
Beryllium (ppb)	4	4	0.5	As Required	NS	NS	NS	2014	
Cadmium (ppb)	5	5	0.5	As Required	NS	NS	NS	2014	
Chromium (ppb)	100	100	2	As Required	NS	NS	NS	2014	
Copper (ppm)	1,300	AI=1300	1,000	As Required	NS	NS	NS	2014	
Cyanide (ppb)	200	200	200	As Required	NS	NS	NS	2014	
Fluoride (ppb)	4,000	4,000	100	As Required	NS	NS	NS	2014	
Mercury (ppb)	2	2	0.2	As Required	NS	NS	NS	2014	
Nickel (ppb)	UR	UR	20	As Required	NS	NS	NS	2014	
Nitrate (ppb)	10,000	10,000	200	As Required	ND	0.8	0.3	2014	
Nitrite (ppb)	1,000	1,000	1	As Required	NS	NS	NS	2014	
Selenium (ppb)	50	50	5	As Required	NS	NS	NS	2014	
Sodium (ppb)	N/A	N/A	100	As Required	NS	NS	NS	2014	
Thallium (ppb)	0.5	2	2	As Required	NS	NS	NS	2014	
<b>Synthetic Organic Compounds</b>									
2,4-D (ppb)	70	70	0.14	As Required	NS	NS	NS	2014	
2,4,5-TP (Silvex) (ppb)				As Required	NS	NS	NS	2014	
Dalapon (ppb)	200	200	0.11	As Required	NS	NS	NS	2014	
Dicamba	UR	UR	0.2	As Required	NS	NS	NS	2014	
Dinoseb (ppb)	7	7	0.2	As Required	NS	NS	NS	2014	
Pentachlorophenol (ppb)	0	1	0.05	As Required	NS	NS	NS	2014	
Picloram (ppb)	500	500	0.17	As Required	NS	NS	NS	2014	
Glyphosphate (ppb)	700	700	9.2	As Required	NS	NS	NS	2014	
Diquat (ppb)	20	20	0.6	As Required	NS	NS	NS	2014	
Aldrine	UR	UR	0.2	As Required	NS	NS	NS	2014	
Chlorodane (ppb)	0	2	0.1	As Required	NS	NS	NS	2014	
Dieldrin (ppb)	UR	UR	0.02	As Required	NS	NS	NS	2014	
Endrin (ppb)	2	2	0.1	As Required	NS	NS	NS	2014	
Heptachlor (ppt)	0	400	40	As Required	NS	NS	NS	2014	
Heptachlor epoxide (ppt)	0	200	20	As Required	NS	NS	NS	2014	
Lindane (ppt)	200	200		As Required	NS	NS	NS	2014	
Methoxychlor (ppb)	40	40	0.1	As Required	NS	NS	NS	2014	
Polychlorinated biphenyls (ppt)	0	500		As Required	NS	NS	NS	2014	
<b>Volatile Organic Compounds</b>									
Vinyl chloride (ppb)	0	2	0.03	As Required	NS	NS	NS	2014	
Benzene (ppb)	0	5	0.03	As Required	NS	NS	NS	2014	
Carbon tetrachloride (ppb)	0	5	0.01	As Required	NS	NS	NS	2014	
Trichloroethylene (ppb)	0	5	0.01	As Required	NS	NS	NS	2014	
para-Dichlorobenzene (ppb)	75	75	0.03	As Required	NS	NS	NS	2014	
1,1-Dichlorobenzene (ppb)				As Required	NS	NS	NS	2014	
1,1,1-Trichloroethane (ppb)	200	200	0.02	As Required	NS	NS	NS	2014	
cis-1,2-Dichloroethylene (ppb)	70	70	0.01	As Required	NS	NS	NS	2014	
o-Dichlorobenzene (ppb)	600	600	0.03	As Required	NS	NS	NS	2014	
Styrene (ppb)	100	100	0.02	As Required	NS	NS	NS	2014	
Tetrachloroethylene (ppb)	0	5	0.03	As Required	NS	NS	NS	2014	
Toluene (ppm)	1,000	1,000	0.05	As Required	NS	NS	NS	2014	
trans-1,2-Dichloroethylene (ppb)	100	100		As Required	NS	NS	NS	2014	
Xylenes (Total) (ppb)	10,000	10,000	0.05	As Required	NS	NS	NS	2014	
Dichloromethane (ppb)	0	5	0.05	As Required	NS	NS	NS	2014	
1,2,4-Trichlorobenzene (ppb)	70	70	0.02	As Required	NS	NS	NS	2014	
1,1,2-Trichloroethane (ppb)	200	200	0.04	As Required	NS	NS	NS	2014	

**NOTES:**

**ND** = Not Detected - reported concentration of contaminant below detection limit.

**NS** = Not Sampled - contaminant not sampled.

1. Waivers granted for Nitrite; Required sampling and analysis plan for radionuclides, inorganic chemicals, asbestos distribution system, Pesticides/SOC's/PCB's. Waiver based on EPA determination taking into account that contaminants have not appeared in prior year's sampling.
2. Table prepared following EPA Guidance for preparing Consumer Confidence Reports; and the review of sampled data provided by Tribal Water and Sanitation Department.

# Duck Valley Indian Reservation Owyhee, Nevada Shoshone-Paiute Tribes Community Water System Wells

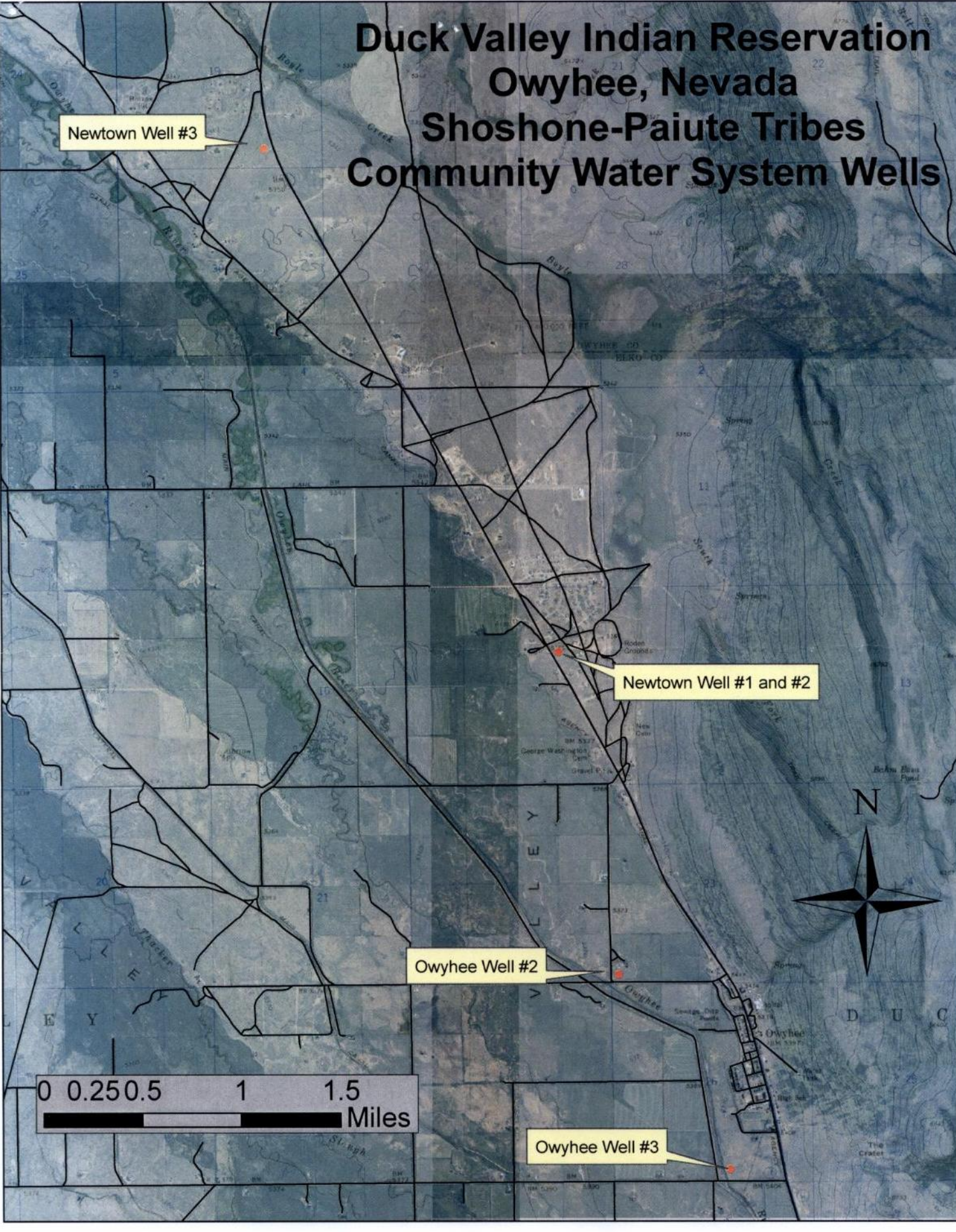
Newtown Well #3

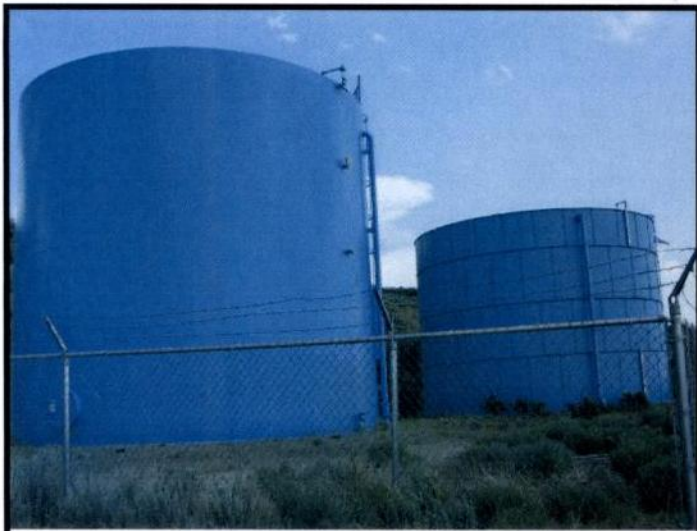
Newtown Well #1 and #2

Owyhee Well #2

Owyhee Well #3

0 0.25 0.5 1 1.5 Miles

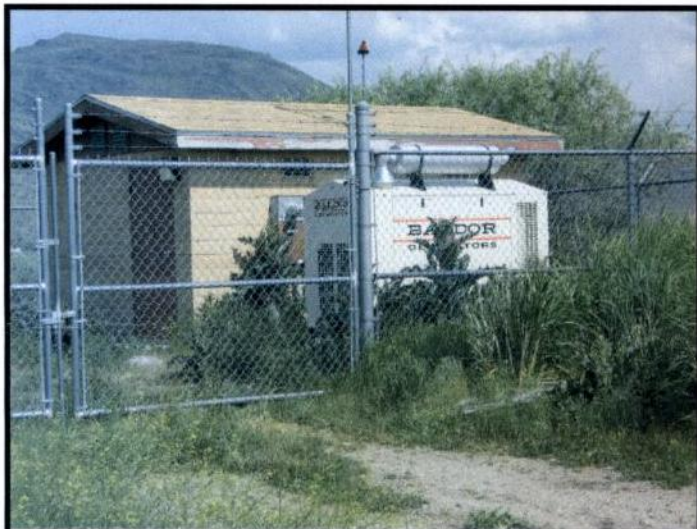




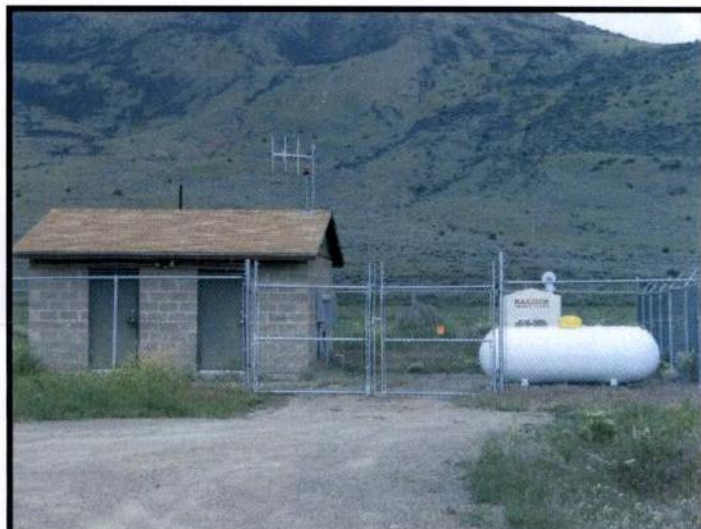
NEWTOWN WATER  
STORAGE TANK



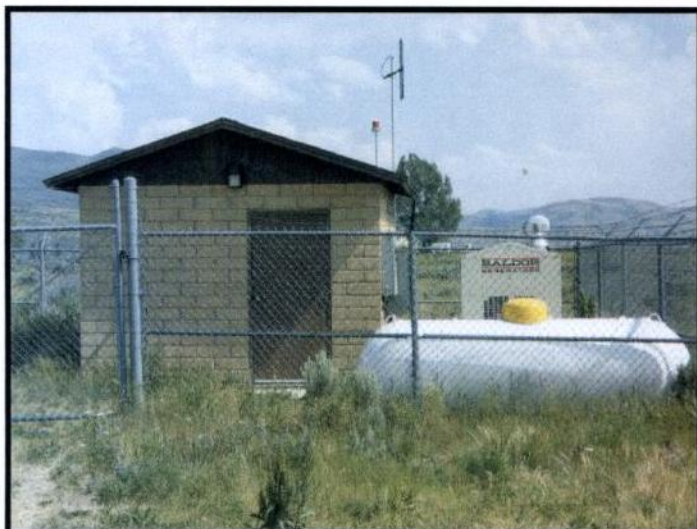
OWYHEE WATER  
STORAGE TANK



OWYHEE WATER SYSTEM NO. 2  
PUMPHOUSE — RIVER ROAD



OWYHEE WATER SYSTEM NO. 3  
PUMPHOUSE — CHINATOWN BRIDGE



NEWTOWN WATER SYSTEM NO. 1 AND 2  
PUMPHOUSE — FIRE STATION ROAD



NEWTOWN WATER SYSTEM NO. 3  
PUMPHOUSE — THOMAS LOOP