

**WHITE MESA COMMUNITY
2013 DRINKING WATER QUALITY REPORT**

PWS ID # 4990004

(For 2012 Safe Drinking Water Act compliance sample results)

What is a Consumer Confidence Report?

The Environmental Protection Agency (EPA) requires that owners of community drinking water systems prepare a report each year that summarizes the quality of their drinking water. The report must be available for customers of the water system to review.

Where does the drinking water in White Mesa come from?

The water supply for White Mesa comes from two deep wells drilled into an aquifer in the Navajo Sandstone formation between 1,260 and 1,515 feet underground. The wells will produce approximately 70 gallons of water per minute. Water is pumped from the wells to two 100,000-gallon "cigarette" storage tank on a hill north of White Mesa. Water pressure in the distribution system is provided by gravity.

What is the current condition of the drinking water system?

Re-completion of the primary well during the summer of 1997 raised its production rate from 25 to 70 gallons per minute. Reconditioning of the second well was also completed in 1998-99. Other improvements on the primary wells conducted in 1997-1999 include the construction of a pump house and installation of 40 horsepower submersible pumps. Three phase power was also installed as part of the work in 1997-1999. In summer of 2011, an electrical surge (due to an auto accident with an electric pole) caused the burn out of the high voltage transformer in the north well pump house and the associated fuses. Upon repairing these damages, it was observed that the pump on the north well had failed. Due to cost and scheduling, the pump has not yet been fixed.

The "cigarette" storage tank was repaired and another tank installed by the Indian Health Service in 2000. Telemetry and alarm systems were installed to better control pressure and supply. The south tank was drained and cleaned in 2010, and a floor leak was repaired. The tank was then disinfected according to industry standards and put back online. In spring of 2012, the tank leaked again and in May it was drained, repaired, disinfected and put back online. The repairs were ineffective, and the tank remains offline.

What is the quality of the White Mesa drinking water?

The Ute Mountain Ute Environmental Programs Department and Public Works Dept. routinely monitor the water in White Mesa for constituents regulated by the Environmental Protection Agency under the Safe Drinking Water Act. **The water supplied to White Mesa residents met all of the Safe Drinking Water standards measured in 2011.** The level of arsenic in the White mesa water supply is at 96% of the standard and is the subject of ongoing treatment research and efforts by the Tribe to procure funding to install a treatment system. One sample analyzed in 2010 had a level higher than the MCL of 10 ug/L arsenic, but it is blended with water from the alternative well and this causes the final product to have a level lower than the MCL.

Those people who are on **sodium restricted diets** should be aware that the drinking water in White Mesa has an average sodium content of **37 mg/l** which is greater than the EPA recommended 20 mg/l for low sodium diets. These individuals should limit the amount of tap water that they consume.

Who do I contact if I have questions about my drinking water?

If you have questions about your drinking water you may call Aldo Hammond at the Ute Mountain Ute Tribe's Public Works Dept. at 970-564-5491 or Scott Clow at the Ute Mountain Ute Environmental Programs Department at 970-564-5432 (email:sclo@utemountain.org).

Other Required Information about Health Effects

Drinking water, including bottled water, 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 effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800) 426-4791.

The sources of drinking water include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it can dissolve naturally occurring minerals and, in some cases, radioactive materials. The water can also pick up substances such as:

- (1) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural operations and wildlife.
- (2) Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- (3) Pesticides and herbicides, that may come from agriculture, urban stormwater runoff, and residential uses.
- (4) Organic chemical contaminants, which can come from industrial processes, gas stations, urban stormwater runoff and septic systems.
- (5) Radioactive contaminants, which 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, the Environmental Protection Agency establishes regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration establishes limits for contaminants in bottled water.

Vulnerable Populations

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The Environmental Protection Agency/Center for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants from the Safe Drinking Water Hotline (800) 426-4791.

KEY TO THE WATER QUALITY TABLE

MCLG – Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there are no adverse health effects. MCLGs allow a margin of safety.

MCL – Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

SMCL – Secondary Maximum Contaminant Level: Secondary standards are established for the aesthetic quality of drinking water such as taste, odor and color. They are not related to human health effects.

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

mg/l – milligrams per liter: Milligrams per liter is equivalent to parts per million.

µg/l – micrograms per liter: Micrograms per liter is equivalent to parts per billion.

pCi/l – Picocuries per liter: A measure of the radioactivity in water. A picocurie is 10^{-12} curies and is the quantity of radioactive material producing 2.22 nuclear transformations per minute.

< - A symbol meaning less than a given value which is usually the detection limit of an analytical method.

See the following pages for water sampling and analysis results from 2012, labeled “**White Mesa 2012-1.**”

Narrative Explanation of Results

Bacteria monitoring is conducted monthly. Samples are usually collected at the Administration Building. No bacteria were detected in any monthly sample during 2012.

Nitrate samples were collected at the south well on two occasions for compliance purposes. Arsenic samples were also collected.

Administrative Violations

A **Notice of Non-compliance** was received by the Tribe in March of 2012. It stated that the Tribe had failed to report bacteria sample results for compliance with the ***total coliform rule*** in a timely manner to the EPA by February 10th, 2012 for the January 2012 monitoring period. The samples had been collected on January 25th as noted in the attached water quality data, and did not contain any bacteria- it was only an administrative violation. As a result of that violation, the Tribe had to provide public notice (posted at the White Mesa Community Center and Travel Center and distributed by White Mesa Administrative staff to Tribal Members and residents). Some inquiries were made to the Environmental Programs Director in this regard for clarification of the situation.

White Mesa 2012-01

Contaminant Measured	DATE SAMPLED	LEVEL DETECTED	Units of Measure	MCL	MCLG	VIOLATION (TYPE)	MAJOR SOURCES AND NOTES ON RESULTS
Total Coliform Bacteria (Collected at White Mesa Travel Center)	1/25/12	0 CFU	CFU	1	0	NO	Naturally occurring in soil, human and animal feces.
	2/28/12	0 CFU	CFU	1	0	NO	
	3/27/12	0 CFU	CFU	1	0	NO	
	4/24/12	0 CFU	CFU	1	0	NO	
	5/29/12	0 CFU	CFU	1	0	NO	
	6/28/12	0 CFU	CFU	1	0	NO	
	7/30/12	0 CFU	CFU	1	0	NO	
	8/29/12	0 CFU	CFU	1	0	NO	
	9/26/12	0 CFU	CFU	1	0	NO	
	10/29/12	0 CFU	CFU	1	0	NO	
	11/26/12	0 CFU	CFU	1	0	NO	
	12/10/12	0 CFU	CFU	1	0	NO	
Arsenic - South Well							
1st Quarter of 4 quarters accelerated monitoring	3/29/2012	0.0082	mg/L	0.01	0	NO	Erosion of natural deposits; runoff from orchards, runoff from glass & electronics production wastes
2nd Quarter of 4 quarters accelerated monitoring	6/21/2012	0.00798	mg/L	0.01	0	NO	
3rd Quarter of 4 quarters accelerated monitoring	9/6/2012	0.0085	mg/L	0.01	0	NO	
4th Quarter of 4 quarters accelerated monitoring	12/10/2012	0.0091	mg/L	0.01	0	NO	
Other data collected:							
Turbidity	12/10/2012	1.86	NTU	na	0	NO	water not treated or filtered
Manganese (Mn)	9/6/2012	0.0065	mg/L	na	0.05	na	
	3/29/2013	0.0085	mg/L	na	0.05	na	
Nitrate	9/6/2012	<0.02	mg/L	10	10	NO	
	12/10/2012	<0.02	mg/L	10	10	NO	
Iron (Fe)	3/29/2012	0.334	mg/L	na	0.3	NO	secondary MCL (not regulated)