

MOJAVE PUBLIC UTILITY DISTRICT
15844 "K" Street
Mojave CA 93501

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FIRST CLASS
MAIL
U.S. POSTAGE
PAID
PERMIT 35
MOJAVE, CA
93501

Mojave Public Utility District Customer
Mojave, CA 93501

WATER QUALITY IN MOJAVE

Consumer Confidence Report

by
Mojave Public Utility District

July 1, 2019

MOJAVE PUBLIC UTILITY DISTRICT

"We're very pleased to provide you with this year's Annual Water Quality Report. We want to keep you informed about the excellent water and service we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of water. We have six wells. Wells 21 & 22 are located in the Chaffee Subunit, and wells 6, 7, 8 and 9 are in the Cameron Flat area. We also purchase water from Antelope Valley-East Kern Water Agency which is treated surface water from the State Water Project, California Aqueduct. We are pleased to report that our drinking water is safe and meets all Federal and State requirements.

This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact Bee Coy, Jr., Mojave Public Utility District General Manager or Daryl Frye Chief Operator at 661 824-4161. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the second and fourth Thursday of each month, at 7:00 PM. Meetings are held at the District office, located at 15844 K Street, Mojave, California.

Mojave Public Utility District routinely monitors for contaminants in your drinking water according to Federal and State regulations. This table shows the results of our monitoring for the period of January 1st to December 31st, 2018. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land 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 activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals, that 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, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, 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, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA and the State Water Resources Control Board Division of Drinking Water prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned throughout monitoring and testing that some contaminants have been detected. The EPA has determined that your water IS SAFE at these levels.

All 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 the 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 Hotline 1-800-426-4791.

To ensure that the high-quality water we deliver is not compromised in the distribution system, Mojave P.U.D. has a robust cross-connection control program in place. Cross-connection control is critical to ensuring that activities on customers' properties do not affect the public water supply. Our cross-connection control specialists ensure that all of the existing backflow prevention assemblies are tested annually, assess all non-residential connections, and enforce and manage the installation of new commercial and residential assemblies.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/Aids or other immune system 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. EPA / CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the EPA's Safe Drinking Water Hotline (800) 426-4791.

We at Mojave Public Utility District work around the clock to provide top quality water to every tap. We ask that all our customers help us protect and conserve our water resources, which are the heart of our community, our way of life, and our children's future.

****New permit requirements passed in 2017 for public water systems require lead testing of drinking water in California schools. Mojave Elementary, Mojave Junior/Senior High, and East Kern Community, were sampled during 2018 in order to proactively meet permit requirements for public water systems. Up to eight samples were collected at each school with no exceedances.**

For more information visit:

https://www.waterboards.ca.gov/drinking_water/cerlic/drinkingwater/leadsamplinginschools.html

or contact:

**Mojave Public Utility District
15844 K Street
Mojave, CA
(661) 824-4161**

DISINFECTION RESIDUAL, PRECURSORS, and BYPRODUCTS

| Type of Samples | Parameter | Units | MCL/MRDL | DLR | MRDLG | RESULTS | |
|-----------------|---|-------|--------------------|-----|-------|-----------|---------|
| | | | | | | Range | Average |
| Distribution | Chlorine (as total Cl2) | mg/L | 4.0** | | 4 | 0.00-1.70 | 1.06 |
| Treated Water | Total Organic Carbon (TOC) | mg/L | Treatment Required | 0.3 | | 0.5-0.8 | 0.6 |
| Source Water | Total Organic Carbon (TOC) | mg/L | Treatment Required | 0.3 | | 0.5-0.7 | 0.6 |
| Distribution | Stage 2 D/DBP Rule Total Trihalomethanes | ug/L | 80** | | | 18-44 | 28 # |
| Distribution | Stage 2 D/DBP Rule Total Haloacetic Acids | ug/L | 60** | | | 3.3-7.0 | 5.0 # |
| Treated Water | Bromate | ug/L | 10* | 5 | | -- | -- |

** Running annual Average of distribution system samples. The MCLs are based upon Running Annual Averages.
Stage 2 D/DBP Rule Total THMs and Total HAAs compliance is based upon Locational Running Annual Averages.
Location with the highest TTHM average

* Compliance is based on the running annual average computed quarterly, of monthly samples, collected at the entrance to the distribution system.

DEFINITIONS AND FOOTNOTES

Plant Effluent, CWR, is finished, treated drinking water.

Raw Water is the source Water, the California Aqueduct or wells, prior to treatment.

Units: *mg/l* = milligrams per liter, parts per million (ppm)
ug/L = micrograms per liter, parts per billion (ppb)
pg/L = picograms per liter, parts per quadrillion (ppq)
umhos = micromhos, a measure of specific conductance
MFL = million fibers per liter
pCi/L = pico curies per liter
< = less than
> = greater than
ND = none detected above the DLR
NTU = nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

MCL: Maximum Contaminant Level. The highest level of a contaminant that is allowed in drinking water. MCLs are set by the US Environmental Protection Agency or the State Water Resources Control Board as close to the PHGs and MCLGs as is economically or technologically feasible.

MRDL: Maximum Residual Disinfectant Level. The level of a disinfectant added for water treatment that may not be exceed at the consumer's tap.

DLR: Detection Limit for purposes of Reporting.

(DL): Detection limit determined by the laboratory when no DLR has been established.

MCLG: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

MRDLG: Maximum Residual disinfectant Level Goal. The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLG are set by the US Environmental Protection Agency.

PHG: Public Health Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Office of Environmental Health Hazard Assessment.

Primary Drinking Water Standard: Primary MCLs, specific treatment techniques adopted in lieu of primary MCLs, and monitoring and reporting requirements for MCLs that are specified in regulations.

Secondary Standards: Aesthetic standards established by the State Water Resources Control Board.

All analyses performed by ELAP certified laboratories: AVEK Water Agency, Eurofins Eaton Analytical Laboratories, or Eurofins subcontract lab.

The following are definitions of some of the terms used in this report:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Primary Drinking Water Standards (PDWS): MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect the taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect health at the MCL levels.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Contaminant Level Goal (MCLG): The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (USEPA).

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

ND: Not detectable at testing limit ❖ **ppm:** Parts per million, milligrams per liter (mg/L) or micrograms per liter (ug/L) □ **ppb:** parts per billion or micrograms per liter (mg/L) □ **ppt:** parts per trillion or nanograms per liter (ng/L) □ **pCi/L:** Picocuries per liter (a measure of radiation)
□ < Less than □ > Greater than

This first table lists all constituents detected in our drinking water with MCLGs, and/or PHGs established by the EPA. The results are reported in the required “CCRUnits” according to the EPA regulation for Consumer Confidence Reports. At the conclusion of this table, another table entitled “Annual Water Quality Report” includes all regulated and unregulated constituents analyzed for and the results. Finally, copies of the actual analytical reports are also presented for your records.

Upon receipt of notification from a person operating a public water system, the following notification must be given within 10-days [Health and Safety Code Section 116450(g)].:

- **SCHOOLS:** Must notify school employees, students, and parents (if the students are minors).
- **RESIDENTIAL RENTAL PROPERTY OWNERS OR MANAGERS (including nursing homes and care facilities):** Must notify tenants.
- **BUSINESS PROPERTY OWNERS, MANAGERS, OR OPERATORS:** Must notify employees of businesses located on the property.

This notice is being sent to you by Mojave PUD.

State Water System ID#: 1510014. Date distributed: July 1, 2019.

**** Arsenic** - District Wells No. 7, 8, & 9 in the Cameron Flat well field contained a running annual average concentration of 14.3, 13, and 10.75 ug/L, respectively, in the last quarter of 2018. These levels are in excess of the MCL of 10 ug/L.

The Arsenic Treatment Plant at Well No. 9 is in service to remove arsenic from well water (Wells No. 7,8, and 9) to below the MCL and meet the arsenic drinking water standard before delivery to customers.

TEST RESULTS

Antelope Valley-East Kern Water Agency
2018 Annual Water Quality Report - Kern County System

| Contaminant | Violation YIN | Level Detected | Range | Unit | MCL | PHG | MCLG | Likely Source of Contamination | SYNTHETIC ORGANIC CONTAMINANTS | | | | | | | | RESULTS | | | |
|--|---------------|--------------------------|--------------------------------|----------|------------------------|-------|------|--|--------------------------------|-------|-------|-----------------------|--------|-------|---------|-------|------------------------|--|--|--|
| Microbiological Contaminants | | | | | | | | | | | | | | | | | Rosamond Plant | | | |
| Turbidity | N | 0.42 | <0.1-0.42 | NT Units | 5TT | N/A | N/A | Soil Runoff | | | | | | | | | Raw Influent (Sources) | | | |
| Radioactive Contaminants | | | | | | | | | | | | | | | | | Wells | | | |
| Alpha Activity, Gross | N | 6.78 | 5.21-6.78 | pCi/L | 15 | N/A | N/A | Erosion of natural deposits | Parameter | Units | MCL | DLR (D ⁺) | PHG | Range | Average | Range | Average | | | |
| Inorganic Contaminants | | | | | | | | | | | | | | | | | | | | |
| Aluminum | N | <0.05 | 0.0-0.05 | mg/L | 1 | N/A | N/A | Erosion of natural deposits, residue from some surface water treatment process | Alachor | ug/L | 2 | 1 | 4 | ND | ND | ND | ND | | | |
| | | | | | | | | | Atrazine | ug/L | 1 | 0.5 | 0.15 | ND | ND | ND | ND | | | |
| Antimony | N | <2 | 0.0- <2 | ug/L | 6 | 20 | N/A | Discharge from petroleum refineries; fire retardants, ceramics, electronics; solder | Bentazon | ug/L | 18 | 2 | 200 | ND | ND | ND | ND | | | |
| **Arsenic | N | 15 | <2-15 | ug/L | 10 | N/A | N/A | Erosion of natural deposits; runoff from orchards, glass wastes | Benzo(a)pyrene | ug/L | 0.2 | 0.1 | 0.007 | ND | ND | ND | ND | | | |
| | | | | | | | | Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits | Carbofuran | ug/L | 18 | 5 | 0.7 | ND | ND | ND | ND | | | |
| Barium | N | 28 | 20-28 | ug/L | 1000 | N/A | 2 | | Chlordane | ug/L | 0.1 | 0.1 | 0.03 | ND | ND | ND | ND | | | |
| | | | | | | | | Discharge from metal refineries, coal-burning factories, and electrical, aerospace, and defense industries. | 2,4-D | ug/L | 70 | 10 | 20 | ND | ND | ND | ND | | | |
| Beryllium | N | <1 | 0.0-<1 | ug/L | 4 | N/A | 4 | | Dalapon | ug/L | 200 | 10 | 790 | ND | ND | ND | ND | | | |
| | | | | | | | | Internal Corrosion of galvanized pipes; erosion of natural deposits; discharge from electroplating and industrial chemical factories & metal refineries; runoff from waste batteries and paints. | Dibromochloropropane (DBCP) | ug/L | 0.2 | 0.01 | 0.0017 | ND | ND | ND | ND | | | |
| Cadmium | N | <1 | 0.0-<1 | ug/L | 5 | .07 | N/A | | Di(2-ethylhexyl)adipate | ug/L | 400 | 5 | 200 | ND | ND | ND | ND | | | |
| | | | | | | | | Discharge from steel and pulp mills and chrome plating, erosion of natural deposits | Di(2-ethylhexyl)phthalate | ug/L | 4 | 3 | 12 | ND | ND | ND | ND | | | |
| Total Chromium | N | 16 | <10-16 | ug/L | 50 | 2.5 | N/A | | Dinoseb | ug/L | 7 | 2 | 14 | ND | ND | ND | ND | | | |
| | | | | | | | | Discharge from steel/metal plastic and fertilizer factories | Diquat | ug/L | 20 | 4 | 6 | ND | ND | ND | ND | | | |
| Cyanide | N | | | ug/L | 200 | 150 | N/A | | Endothall | ug/L | 100 | 45 | 94 | ND | ND | ND | ND | | | |
| Fluoride | N | .61 | 0.21-0.61 | mg/L | 2 | 1 | N/A | Erosion of natural deposits; water additive which promotes strong teeth, discharge from fertilizer, and aluminum factories. | Endrin | ug/L | 2 | 0.1 | 0.3 | ND | ND | ND | ND | | | |
| | | | | | | | | | Ethylene Dibromide (EDB) | ug/L | 0.05 | 0.02 | 0.01 | ND | ND | ND | ND | | | |
| Mercury (Inorganic) | N | <0.2 | 0.0-<0.2 | ug/L | 2 | 1.2 | N/A | Erosion of natural deposits discharge from refineries & factories, runoff from landfills, runoff from cropland | Glyphosate | ug/L | 700 | 25 | 900 | ND | ND | ND | ND | | | |
| | | | | | | | | | Heptachlor | ug/L | 0.01 | 0.01 | 0.008 | ND | ND | ND | ND | | | |
| | | | | | | | | | Heptachlor Epoxide | ug/L | 0.01 | 0.01 | 0.006 | ND | ND | ND | ND | | | |
| Nickel | N | <10 | 0.0-<10 | ug/L | 100 | N/A | 100 | Erosion of natural deposits; discharge from metal factories | Hexachlorobenzene | ug/L | 1 | 0.5 | 0.03 | ND | ND | ND | ND | | | |
| Nitrate (As N) | N | 3.3 | 1.8-3.3 | mg/L | 10 | 10 | N/A | Runoff from leaching from fertilizer use; leaching from septic tanks, sewage erosion of natural deposits | Hexachlorocyclopentadiene | ug/L | 50 | 1 | 2 | ND | ND | ND | ND | | | |
| | | | | | | | | | Lindane | ug/L | 0.2 | 0.2 | 0.032 | ND | ND | ND | ND | | | |
| Nitrite (As N) | N | <50 | 0.0-<50 | ug/L | 1000 | 1000 | N/A | Runoff from leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits | Methoxychlor | ug/L | 30 | 10 | 0.09 | ND | ND | ND | ND | | | |
| | | | | | | | | Discharge from petroleum glass and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturer; runoff from livestock lots (feed additive) | Molinate | ug/L | 20 | 2 | 1 | ND | ND | ND | ND | | | |
| Selenium | N | 3.8 | 0.0-3.8 | ug/L | 50 | N/A | 50 | | Oxamyl | ug/L | 50 | 20 | 26 | ND | N | ND | ND | | | |
| Synthetic Organic Contaminants including Pesticides and Herbicides | | | | | | | | | Pentachlorophenol | ug/L | 1 | 0.2 | 0.3 | ND | D | ND | ND | | | |
| | | | | | | | | | Picloram | ug/L | 500 | 1 | 166 | ND | ND | ND | ND | | | |
| Thallium | N | <1 | 0.0-<1 | ug/L | 2 | 0.1 | N/A | Leaching from ore-processing sites; discharge from electronics, glass and drug factories | Polychlorinated Biphenyls | ug/L | 0.5 | 0.5 | 0.09 | ND | ND | ND | ND | | | |
| Volatile Organic Contaminants | | | | | | | | | Simazine | ug/L | 4 | 1 | 4 | ND | ND | ND | ND | | | |
| TTHM | N | 18 | 17-18 | ug/L | 80 | N/A | 0 | By-product of drinking water chlorination | Thiobencarb (Bolero) | ug/L | 70 | 1 | 42 | ND | ND | ND | ND | | | |
| Total trihalomethanes | | | | | | | | | Toxaphene | ug/L | 3 | 1 | 0.03 | ND | ND | ND | ND | | | |
| HAA5 | N | 3.7 | 3-3.7 | ug/L | 60 | N/A | N/A | By-product of drinking water chlorination | 2,3,7,8-TCDD (Dioxin) | ug/L | 30 | 5 | 0.05 | ND | ND | ND | ND | | | |
| Total Haloacetic | | | | | | | | | 2,4,5-TP (Silvex) | ug/L | 50 | 1 | 3 | ND | ND | ND | ND | | | |
| | | | | | | | | | 1,2,3-Trichloropropane | ug/L | 0.005 | 0.005 | 0.0007 | ND | ND | ND | ND | | | |
| Lead and Copper | | | | | | | | | | | | | | | | | | | | |
| | | No. of Samples Collected | 90th percentile level detected | | No. Sites exceeding AL | AL | MCL | Internal Corrosion -Of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits | | | | | | | | | | | | |
| Lead (mg/L) | | 25 | 0.0037 | | 0 | 0.015 | 2 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| Copper (mg/L) | | 25 | 0.21 | | 0 | 1.3 | 1 | Internal Corrosion of household water plumbing systems; erosion of natural deposits. | | | | | | | | | | | | |

ANNUAL WATER QUALITY REPORT - MOJAVE PUD

Primary Standards - Mandatory Health-Related Standards Established by the
State of California, Department of Health Services

VOLATILE ORGANIC CONTAMINANTS

RESULTS

| Parameter | Units | MCL | DLR | PHG | Rosamond Plant | | Water Bank | |
|--|-------|------|-----|------|------------------------|---------|------------|---------|
| | | | | | Raw Influent (Sources) | | Wells | |
| | | | | | Range | Average | Range | Average |
| 1,1,1-Trichloroethane (1,1,1-TCA) | ug/L | 200 | 0.5 | 1000 | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane | ug/L | 1 | 0.5 | 0.1 | ND | ND | ND | ND |
| 1,1,2-Trichloroethane (1,1,2-TCA) | ug/L | 5 | 0.5 | 0.3 | ND | ND | ND | ND |
| 1,1-Dichloroethane (1,1-DCA) | ug/L | 5 | 0.5 | 3 | ND | ND | ND | ND |
| 1,1-Dichloroethylene (1,1-DCE) | ug/L | 6 | 0.5 | 10 | ND | ND | ND | ND |
| 1,2,4-Trichlorobenzene | ug/L | 5 | 0.5 | 5 | ND | ND | ND | ND |
| 1,2-Dichlorobenzene (o-DCB) | ug/L | 600 | 0.5 | 600 | ND | ND | ND | ND |
| 1,2-Dichloroethane (1,2-DCA) | ug/L | 0.5 | 0.5 | 0.4 | ND | ND | ND | ND |
| 1,2-Dichloropropane | ug/L | 5 | 0.5 | 0.5 | ND | ND | ND | ND |
| 1,3-Dichloropropene (Total) | ug/L | 0.5 | 0.5 | 0.2 | ND | ND | ND | ND |
| 1,4-Dichlorobenzene (p-DCB) | ug/L | 5 | 0.5 | 6 | ND | ND | ND | ND |
| Benzene | ug/L | 1 | 0.5 | 0.15 | ND | ND | ND | ND |
| Carbon tetrachloride | ug/L | 0.5 | 0.5 | 0.1 | ND | ND | ND | ND |
| cis-1,2-Dichloroethylene (c-1,2-DCE) | ug/L | 6 | 0.5 | 100 | ND | ND | ND | ND |
| cis-1,3-Dichloropropene | ug/L | | | | ND | ND | ND | ND |
| Dichloromethane (Methylene Chloride) | ug/L | 5 | 0.5 | 4 | ND | ND | ND | ND |
| Ethylbenzene | ug/L | 300 | 0.5 | 300 | ND | ND | ND | ND |
| Methyl-tert-butyl-ether (MTBE) | ug/L | 13 | 3 | 13 | ND | ND | ND | ND |
| Monochlorobenzene (Chlorobenzene) | ug/L | 70 | 0.5 | 70 | ND | ND | ND | ND |
| Styrene | ug/L | 100 | 0.5 | 0.5 | ND | ND | ND | ND |
| Tetrachloroethylene (PCE) | ug/L | 5 | 0.5 | 0.06 | ND | ND | ND | ND |
| Toluene | ug/L | 150 | 0.5 | 150 | ND | ND | ND | ND |
| trans-1,2-Dichloroethylene (t-1,2-DCE) | ug/L | 10 | 0.5 | 60 | ND | ND | ND | ND |
| trans-1,3-Dichloropropene | ug/L | | | | ND | ND | ND | ND |
| Trichloroethylene (TCE) | ug/L | 5 | 0.5 | 1.7 | ND | ND | ND | ND |
| Trichlorotrifluoromethane (Freon 11) | ug/L | 150 | 5 | 1300 | ND | ND | ND | ND |
| Trichlorotrifluoroethane (Freon 113) | ug/L | 1200 | 10 | 4000 | ND | ND | ND | ND |
| Vinyl Chloride (VC) | ug/L | 0.5 | 0.5 | 0.05 | ND | ND | ND | ND |
| Xylenes (Total) | ug/L | 1750 | 0.5 | 1800 | ND | ND | ND | ND |

| PARAMETER | UNITS | MAXIMUM CONTAMINANT LEVEL | MOJAVE P.U.D. WELLS AVG. |
|---|-------|---------------------------|--------------------------|
| INORGANIC CHEMICALS | | | |
| Aluminum | ug/L | 1000 | <50 |
| Antimony | ug/L | 6 | <2 |
| Arsenic | ug/L | 10 | 7.68 |
| Asbestos | MFL | 7 | ND |
| Barium | ug/L | 1000 | 25 |
| Beryllium | ug/L | 4 | < 1.0 |
| Total Chromium | ug/L | 50 | < 10 |
| Cadmium | ug/L | 5 | <1 |
| Cyanide | ug/L | 200 | < 20 |
| Fluoride | mg/L | 2 | 0.43 |
| Lead | mg/L | 2 | <1 |
| Mercury | ug/L | 2 | <0.2 |
| Nickel | ug/L | 100 | <10 |
| Nitrate (As No3) | mg/L | 10 | 2.53 |
| Nitrite(As N) | ug/L | 1000 | <50 |
| Selenium | ug/L | 50 | <2.05 |
| Silver | ug/L | 100 | <10 |
| Thallium | ug/L | 2 | <1 |
| RADIOACTIVITY | | | |
| Gross Alpha Activity | pCi/L | 15 | 7.56 |
| Gross Beta Activity | pCi/L | 50 | NR |
| Radium 226 & 228 Combined | pCi/L | | NR |
| Strontium-90 | pCi/L | 8 | NR |
| Tritium | pCi/L | 20,000 | NR |
| Uranium | pCi/L | 20 | 7.2 |
| Color | Units | 15 | 1.17 |
| Odor-Threshold @ 60 C | Units | 3 | ND |
| Chloride | mg/L | 500 | 39.7 |
| Copper | ug/L | 1000 | <10 |
| MBAS | mg/L | 0.5 | <0.1 |
| Iron | ug/L | 300 | <50 |
| Manganese | ug/L | 50 | <10 |
| Sulfate | mg/L | 500 | 208 |
| Zinc | ug/L | 5000 | <50 |
| Total Dissolved Solids | mg/L | 1000 | 677 |
| Additional Constituents Analyzed | | | |
| pH | | No Standard | 7.82 |
| Hardness (CaCO ₃) | mg/L | No Standard | 305 |
| Sodium | mg/L | No Standard | 117 |
| Calcium | mg/L | No Standard | 78 |
| Potassium | mg/L | No Standard | |
| Magnesium | mg/L | No Standard | 27 |
| MTBE | ug/L | 13 | <0.5 |
| Chromium, Hexavalent | ug/L | No Standard | 3.4 |
| Boron | ug/L | | |
| Vanadium | mg/L | | |
| Perchlorate | ug/L | 6 | <4.0 |
| 1,2,3-Trichloropropane | ug/L | .005 | ND |

The Antelope Valley-East Kern Water Agency provides treated surface water and treated groundwater as our sources of drinking water.

Treatment technique: Conventional

EPA Turbidity Performance Standards: Turbidity of the filtered water must:

1. Be less than or equal to 0.30 NTU in 95% of measurements in a month.
2. Not exceed 1 NTU at any time.

Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1: **100%**

Highest single turbidity measurement during the year: **0.25 NTU**

Percentage of samples <0.30 NTU: **100%**

The number of violations of any surface water treatment requirements: **NONE**

Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

The Antelope Valley-East Kern Water Agency also provides chlorinated groundwater as an alternative source of drinking water.

Treatment technique: Chlorination

EPA Groundwater Rule: AVEK meets the requirements of the Groundwater Rule by providing a minimum of 4-log reduction of viruses by continuously providing a minimum free chlorine residual of 0.5 mg/L leaving the clearwell.

Lowest single free chlorine residual measurement during the year: **0.79**

Number of violations of the Groundwater Rule: **NONE**

MICROBIOLOGICAL CONTAMINANTS

| Type of Samples | Parameter | Sampling Frequency | MCL | No. of Months in Violation | System Results | |
|-----------------|-------------------------|--------------------|----------------------|----------------------------|----------------|---------|
| | | | | | Range | Average |
| Distribution | Total Coliform Bacteria | 56 - 70 / mo | 5% positive | None | 0% | 0% |
| Distribution | E. coli | 56 - 70 / mo | 1 pos. with 2 TC pos | None | 0% | 0% |

INORGANIC CONTAMINANTS

| RESULTS | | | | | | | | | | | | |
|------------------------|-------|------|-----|-------|----------------------|---------|------------------------|---------|----------------|---------|-----------|---------|
| | | | | | Rosamond Plant | | | | Water Bank | | | |
| | | | | | Plant Effluent (CWR) | | Raw Influent (Sources) | | Effluent (CWR) | | Wells | |
| | | | | | | | | | | | | |
| Parameter | Units | MCL | DLR | PHG | Range | Average | Range | Average | Range | Average | Range | Average |
| Aluminum | ug/L | 1000 | 50 | 600 | ND-150 | 84 | ND | ND | | | ND | ND |
| Antimony | ug/L | 6 | 6 | 1 | | ND | ND | ND | | | ND | ND |
| Arsenic | ug/L | 10 | 2 | 0.004 | | 5.0 | 2.0-8.8 | 4.8 | 3.4-5.6 | 4.3 | 2.4-18 | 5.0 |
| Barium | ug/L | 1000 | 100 | 2000 | | ND | 32-100 | 62 | | | 36.90 | 65 |
| Beryllium | ug/L | 4 | 1 | 1 | | ND | ND | ND | | | ND | ND |
| Cadmium | ug/L | 5 | 1 | 0.04 | | ND | ND | ND | | | ND | ND |
| Chromium (Total) | ug/L | 50 | 10 | | | ND | ND-16 | 6.0 | | | ND | ND |
| Chromium (Hexavalent) | ug/L | * | 1 | 0.02 | | 3.3 | 0.80-15 | 7.7 | | | 1.5-6.1 | 3.1 |
| Cyanide | ug/L | 150 | 100 | 150 | | ND | ND | ND | | | ND | ND |
| Fluoride | mg/L | 2 | 0.1 | 1 | | 0.20 | 0.17-0.33 | 0.23 | | | 0.14-.030 | 0.20 |
| Lead | ug/L | 15 | 5.0 | 0.2 | | ND | ND-0.59 | 0.10 | | | ND-1.1 | 0.28 |
| Mercury | ug/L | 2 | 1 | 1.2 | | ND | ND | ND | | | ND-6.9 | 1.1 |
| Nickel | ug/L | 100 | 10 | 12 | | ND | ND | ND | | | ND-15 | 3.1 |
| Nitrate (as N) | mg/L | 10 | 0.4 | 10 | | 3.4 | 0.86-4.2 | 2.6 | | | 1.5-4.4 | 3.3 |
| Nitrite (as N) | mg/L | 1 | 0.4 | 1 | | ND | ND | ND | | | ND | ND |
| Nitrate+Nitrite (as N) | mg/L | 10 | | 10 | | 3.4 | 0.86-4.2 | 2.7 | | | 1.5-4.4 | 3.3 |
| Perchlorate | ug/L | 6 | 4 | 1 | | ND | ND-0.43 | 0.11 | | | ND | ND |
| Selenium | ug/L | 50 | 5 | 30 | | ND | ND-10 | 2.7 | | | ND-9.7 | 2.8 |
| Thallium | ug/L | 2 | 1 | 0.1 | | ND | ND | ND | | | ND | ND |

There is currently no MCL for hexavalent chromium. The previous MCL of 0.010 mg/L was withdrawn on September 11, 2017.

GENERAL PHYSICAL AND SECONDARY STANDARDS

RESULTS

| Parameter | Units | MCL | DLR | Rosamond Plant | | | | Water Bank | | | |
|----------------------------------|-------|-------------|-----|----------------------|---------|------------------------|---------|----------------|---------|-----------|---------|
| | | | | Plant Effluent (CWR) | | Raw Influent (Sources) | | Effluent (CWR) | | Wells | |
| | | | | Range | Average | Range | Average | Range | Average | Range | Average |
| Aluminum | ug/L | 1000 | 50 | ND-150 | 84 | ND | ND | | | ND | ND |
| Calcium | mg/L | no standard | | | 75 | 26-110 | 70 | | | 30-110 | 63 |
| Chloride | mg/L | 250 | | | 60 | 40-130 | 72 | | | 51-110 | 79 |
| Color | Units | 15 | | <5 | <5 | <5 | <5 | | | <5 | <5 |
| Copper | ug/L | 1000 | 50 | | ND | ND-6.6 | 2.6 | | | ND-7.1 | 2.9 |
| Foaming Agents (MBAS) | mg/L | 0.5 | | | ND | ND | ND | | | ND | ND |
| Hardness (Total) as CaCO3 | mg/L | no standard | | | 220 | 89-340 | 220 | | | 150-330 | 234 |
| Iron | ug/L | 300 | 100 | | ND | ND-130 | 42 | | | ND-160 | 29 |
| Magnesium | mg/L | no standard | | | 8.7 | 5.8-16 | 11 | | | 4.6-13 | 9.2 |
| Manganese | ug/L | 50 | 20 | | ND | ND-5.1 | 1.4 | | | ND-6.4 | 1.0 |
| Odor @60 C | Units | 3 | 1 | <1 | <1 | <1 | <1 | | | <1 | <1 |
| pH | Units | no standard | | 7.3-8.4 | 7.93 | 7.3-8.1 | 7.60 | | | 7.3-7.7 | 7.53 |
| Silver | ug/L | 100 | 10 | | ND | ND | ND | | | ND | ND |
| Sodium | mg/L | no standard | | | 44 | 36-53 | 48 | | | 33-55 | 43 |
| Specific Conductance | umhos | 900 | | 600-610 | 600 | 430-930 | 650 | | | 480-830 | 680 |
| Sulfate | mg/L | 250 | 0.5 | | 50 | 39-100 | 66 | | | 36-92 | 59 |
| Thiobencarb (Bolero) | ug/L | 1 | 1 | | ND | ND | ND | | | ND | ND |
| Methyl tert-Butyl Ether (MTBE) | ug/L | 5 | 3 | | ND | ND | ND | | | ND | ND |
| Total Dissolved Solids | mg/L | 500 | | | 360 | 270-600 | 410 | | | 280-560 | 420 |
| Turbidity | Units | 5 | | 0.01-0.25 | 0.08 | 0.08-0.72 | 0.28 | | | 0.02-3.77 | 0.78 |
| Zinc | mg/L | 5000 | 50 | | ND | ND-40 | 6.7 | | | ND | ND |
| Total Alkalinity (as CaCO3) | mg/L | no standard | | | 160 | 93-180 | 140 | | | 140-200 | 160 |
| Bicarbonate Alkalinity (as HCO3) | mg/L | no standard | | | 190 | 110-220 | 170 | | | 170-220 | 190 |
| Carbonate (as CO3) | mg/L | no standard | | | 2.0 | ND | ND | | | ND | ND |
| Hydroxide (as OH) | mg/L | no standard | | | ND | ND | ND | | | ND | ND |

RADIOLOGICAL CONTAMINANTS

| | | | | | RESULTS | | | |
|--------------|-------|--------|-------|-------|--|---------|---------------------|---------|
| Parameter | Units | MCL | DLR | PHG | Rosamond Plant Raw Influent (Sources) | | Water Bank Wells | |
| | | | | | Range | Average | Range | Average |
| Gross Alpha | pCi/L | 15 | 3 | | ND-3.4 | 1.7 | ND-5.0 | 1.2 |
| Gross Beta | pCi/L | 50 | 4 | | ND-4.1 | 2.7 | ND-4.8 | 2.8 |
| Strontium 90 | pCi/L | 8 | 2 | 0.35 | ND | ND | ND | ND |
| Tritium | pCi/L | 20,000 | 1,000 | 400 | ND | ND | ND | ND |
| Uranium | pCi/L | 20 | 1 | 0.43 | | 6.3 | 3.1-7.1 | 5.0 |
| Radium 228 | pCi/L | | 1 | 0.019 | ND | ND | ND-0.56 | 0.14 |
| Radium 226 | pCi/L | | 1 | 0.05 | ND | ND | ND-0.35 | 0.17 |