

**Water System Name: Morada Estates North Water System CSA 46**

**Report Date:**

**Type of Water Source(s) in Use: Groundwater wells**

**6/2019**

**Name of Source(s) in Use: Wells #1, #2 and #3**

**Table #1: Sampling Results Showing Detection of Coliform Bacteria**

MICROBIOLOGICAL CONTAMINANTS	HIGHEST NO. OF DETECTIONS	NO. of MOS. In VIOLATION	MCL	MCLG	TYPICAL SOURCE OF BACTERIA
Tot. Coliform Bacteria	0	0	>1	0	Naturally present in environment.
Fecal Coliform and <i>E. coli</i>	0	0	>1	0	Human and animal fecal waste.

**Table #2: Sampling Results Showing Detection of Lead and Copper**

LEAD and COPPER	SAMPLE DATE	NO. of SAMPLES	90TH Percentile LEVEL	NO. SITES >AL	AL	MCLG	TYPICAL SOURCE OF CONTAMINANT
Lead (ppb)	2018	5	0	0	15	2	Internal corrosion of household water plumbing systems; discharge from industrial manufacturers; erosion of natural deposits
Copper (ppb)	2018	5	121	0	1300	170	Internal corrosion of household water plumbing systems; discharge from industrial manufacturers; erosion of natural deposits; leeching from wood preservatives

**Table #3: Sampling Results Showing Detection of Sodium and Hardness**

CHEMICAL OR CONSTITUENT	SAMPLE DATE	LEVEL DETECTED	RANGE OF DETECTIONS	MCL	PHG (MCLG)	TYPICAL SOURCE OF CONTAMINANT
Sodium (ppm)	2018	10.8	9 - 21	NONE	NONE	Generally found in ground and surface water
Hardness (ppm)	2018	97	87 - 297	NONE	NONE	Generally found in ground and surface water
Total Alkalinity (ppm)	2018	109.3	100 - 260	NONE	NONE	Generally found in ground and surface water
Calcium (ppm)	2018	20.7	17 - 63	NONE	NONE	Generally found in ground and surface water
Magnesium (ppm)	2018	11	11 - 34	NONE	NONE	Generally found in ground and surface water
Potassium (ppm)	2018	4.1	4 - 6	NONE	NONE	Generally found in ground and surface water

**Table #4: Detection of Contaminants with a PRIMARY Drinking Water Standard**

CHEMICAL OR CONSTITUENT	SAMPLE DATE	LEVEL DETECTED	RANGE OF DETECTIONS	MCL	PHG (MCLG)	TYPICAL SOURCE OF CONTAMINANT
Gross Alpha Activity (pCi/L)	2016	0.14	ND - 10.6	15	N/A	Erosion of natural deposits.
Uranium (pCi/L)	2016	0.14	ND - 10.2	20	1	Erosion of natural deposits.
Arsenic	2018	2.9	2 - 3	10	0.004	Erosion of natural deposits;run-off from orchards; glass and electronics production wastes.
Barium (ppb)	2018	0.14	ND - 191	1000	2	Oil drilling and metal refinery waste discharge; erosion of natural deposits.
Chromium (ppb)	2018	11	ND - 16	50	2.5	Discharge from steel & pulp mills & chrome plating; erosion of natural deposits.
Lead (ppb)	2018	*8.9	0 - 16.6	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Nickel (ppb)	2018	49.6	ND - 54	100	100	Erosion of natural deposits; discharge from metal factories.
Nitrate as N (ppm)	2018	0.68	0.4 - 8.3	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.
1,2,3-Trichloropropane (ppb)	2018	0.01	ND - 26	5	0.7	Discharge from industrial and agricultural chemical factories; leaching from hazardous waste sites; used as cleaning and maintenance solvent, paint and varnish remover, and cleaning and degreasing agent; byproduct during the production of other compounds and pesticides.

**Table #5: Detection of Contaminants with a SECONDARY Drinking Water Standard**

CHEMICAL OR CONSTITUENT	SAMPLE DATE	LEVEL DETECTED	RANGE OF DETECTIONS	MCL	PHG (MCLG)	TYPICAL SOURCE OF CONTAMINANT
Copper (ppm)	2018	73.4	ND - 80	1000	N/A	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Corrosivity	2018	-0.48	-0.3 - 0.3	Non-corrosive	N/A	Natural or industrially influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors.
Total Dissolved Solids (TDS)	2018	171	170 - 440	1000	N/A	Run-off /leaching from natural deposits.
Specific Conductance	2018	254.3	231 - 673	1600	N/A	Substances that form ions when in water, seawater influence.
Chloride (ppm)	2018	6.85	5 - 25	500	N/A	Substances that form ions when in water, seawater influence.
Sulfate (ppm)	2018	7.4	7.3 - 29.8	500	N/A	Leaching from natural deposits; industrial wastes.
Turbidity (units)	2018	0.22	0.2 - 0.5	N/A	N/A	Soil run-off.
Zinc (ppb)	2018	211	ND - 230	5000	N/A	Run-off/leaching from natural deposits; industrial wastes.

**Table #6: Detection of UNREGULATED Contaminants**

CHEMICAL OR CONSTITUENT	SAMPLE DATE	RANGE OF DETECTIONS	NOTIFICATION LEVEL	HEALTH EFFECTS LANGUAGE
Vanadium (ppb)	2018	23 - 28	50	The babies of some pregnant women who drink water containing vanadium in excess of the notification level may have an increased risk of developmental defects (based on studies in laboratory animals).

Drinking water is tested for quality for many constituents as required by State and Federal regulations. This report shows the results of our monitoring for the period of Jan. 1 thru Dec. 31, 2018, or for the period as noted.

\* Any violation of an MCL or AL is asterisked. Additional information concerning the violation is provided below.

#### Summary Information for Contaminants Exceeding an AL or MCL

Some people who drink water containing 1,2,3-trichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.

1,2,3-trichloropropane was found at levels exceeding the MCL in well #1. During 2018 well #1 provided less than one tenth of one percent (<0.1%) of the total water produced in Morada Estates North. The Environmental Health Department of San Joaquin County issued a Compliance Order on July 30, 2018 directing Utilities Maint. to comply with the MCL. Utilities Maint. worked with the EHD to change the status of well #1 from "Active source" to "Emergency Standby" thus bringing the water system into compliance in August 2018. Residents of Morada Estates North were notified of these actions on or about August 27, 2018.

Infants and children who drink water containing lead in excess of the action level may experience delays in their physical or mental development. Children may show slight deficits in attention span and learning abilities. Adults who drink this water over many years may develop kidney problems or high blood pressure.

**Drinking Water Source Assessment Information:** A source water assessment for the wells of the Morada Estates North PWS water system was completed in July 2002. The source is considered most vulnerable to the following activities associated with contaminants detected in the water supply: There have been no contaminants detected in the water supply, however the source is still considered vulnerable to activities located near the drinking water source. The source is considered most vulnerable to the following activities not associated with any detected contaminants: Automobile (gas stations), Chemical/petroleum/processing/storage, Known contaminant plumes), Septic systems (high density), Transportation corridors (railroads), Underground storage tanks (confirmed leaking tanks), Wells (water supply).

*A copy of the complete assessment is available at:*

San Joaquin County, Environmental Health Department  
1868 East Hazelton Avenue, Stockton, CA 95202

*You may request a summary of the assessment be sent to you by contacting:*

Small Public Water Systems, San Joaquin County Environmental Health Department, (209) 468-3420