

# Water System Name: Clements Water System CSA43

Report Date: 07/08

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

Name of Source(s) in Use: Well #1, #2

**Drinking Water Source Assessment Information:** A source water assessment for well #1 of the Clements PWS water system was completed in July 2002. Well # 2 was completed prior to construction in 2006. The sources are 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: Housing (high density), Transportation corridors (freeways/state highways).

**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 (highest in month)	0	> 1	0	Naturally present in environment
Fecal Coliform and <i>E. coli</i>	0 (year total)	0	> 1	0	Human and animal fecal waste

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

LEAD and COPPER	NO. of SAMPLES	90 <sup>TH</sup> Percentile LEVEL	NO. SITES > AL	AL	MCLG	TYPICAL SOURCE OF CONTAMINANT
Lead (ppb)	5	0.4	0	15	2	Internal corrosion of household water plumbing systems; discharge from industrial manufacturers; erosion of natural deposits
Copper (ppb)	5	80	0	1300	170	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching 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)	2006-8	10	9-11	none	none	Generally found in ground and surface water
Hardness (ppm)	2006-8	67.5	67-68	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)	2006	1.46	-	15	N/A	Erosion of natural deposits
Uranium (pCi/L)	2006	0.88	-	20	N/A	Erosion of natural deposits
Barium (ppb)	2006-8	51.5	50.9-52	1000	2	Oil drilling and metal refinery waste discharge; erosion of natural deposits
Chromium (ppb)	2006-8	0.5	ND-1	50	2.5	Discharge from steel & pulp mills & chrome plating; erosion of natural deposits
Fluoride (ppm)	2006-8	0.05	ND-0.1	2	1	Erosion of natural deposits; water additive (strong teeth); discharge from fertilizer and aluminum factories
Nitrate (ppm)	2006-8	2.7	1.7-3.7	45	45	Run-off and leaching from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits

**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
Corrosivity	2006-8	-1.2	-	Non-corrosive	N/A	Natural or industrially influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
Turbidity (units)	2006-8	1.6	0.6-2.6	N/A	N/A	Soil run-off
Total Dissolved Solids (TDS) (ppm)	2006-8	165	150-180	1000	N/A	Run-off/leaching from natural deposits
Specific Conductance (microohms)	2006-8	188	180-196	1600	N/A	Substances that form ions when in water; seawater influence
Chloride (ppm)	2006-8	10.5	8-13	500	N/A	Substances that form ions when in water; seawater influence
Iron (ppb)	2006-8	190	ND-380	300	N/A	Substances that form ions when in water; industrial wastes
Manganese (ppb)	2006-8	15	ND-30	50	N/A	Leaching from natural deposits
Sulfate (ppm)	2006-8	5.2	3.4-7	500	N/A	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)	2006-8	7-7	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, 2008.

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

San Joaquin County, Environmental Health Department  
304 E. Weber Ave., 3<sup>rd</sup> Floor, 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