2016 CONSUMER CONFIDENCE REPORT

CITY OF SOLVANG 1644 OAK STREET SOLVANG, CA 93463 (805) 688-5575
http://www.cityofsolvang.com/ccr2016

2016 Consumer Confidence Report

Water System Name: **CITY OF SOLVANG** Report Date: JUNE 2017

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2016 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

Type of water source(s) in use: Ground Water (Solvang Wells & ID#1 Wells) & Surface Water (CCWA)

Name & general location of source(s): Wells 3 & 7A River Wells; Well 4 & HCA South Well-Upland Wells; SantaYnez River Water Conservation District, Improvement District No. 1 (ID#1) & Central Coast Water Authority (CCWA)

Drinking Water Source Assessment information: Source Assessments for the City's wells were completed September 2002. The new HCA South Well source assessment was completed August 2016.

Time and place of regularly scheduled board meetings for public participation: Second & Fourth Monday of each Month at 1644 Oak Street, Solvang, CA @ 6:30 P.M.

For more information, contact: Chris Whitford Phone: (805) 688-5575

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.

Maximum Contaminant Level Goal (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 (USEPA).

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 Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Primary Drinking Water Standards (PDWS): MCLs and MRDLs 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 taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

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

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

Variances and Exemptions: State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (µg/L)

ppt: parts per trillion or nanograms per liter (ng/L)

ppq: parts per quadrillion or picogram per liter (pg/L)

pCi/L: picocuries per liter (a measure of radiation)

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 stormwater 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 stormwater 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 stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants*, that 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, the USEPA and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, 5, and 6 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

City of Solvang 2016 Water Quality Table

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	0	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or *E. coli*	0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or *E. coli*	0	Human and animal fecal waste

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. of samples collected	90th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	8/14	20	ND	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	8/14	20	0.3	1	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant

Sodium (ppm)	3/11/15	62.2	54-73	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	3/11/15	586	477-680	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.

TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL [MRDL]**	**PHG (MCLG) [MRDLG]**	**Typical Source of Contaminant**
Fluoride (ppm)	3/11/15	.18	0.1-0.2	2	1	Erosion of Natural deposits; water additive which promotes strong teeth
Nitrate (ppm) (as NO3)	3/11/15	6.7	1.3-16.9	45	45	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits
Nitrate and Nitrite (as N) (ppm)	3/11/15	1.7	0.3-3.8	10	10	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits
Hexavalent Chromium (ppb)	3/11/15	.25	0-1.1	10	0.02	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits.
Tetrachloroethylene (PCE)* (ppb)	7/27/16	0.175	0-.7	5	N/A	Leaching from PVC pipes: discharge from factories, dry cleaners and auto shops (metal degreasers)
Gross Alpha Activity (pCi/L)	2013-2016	7.61	4.26-13.6	15	N/A	Erosion of natural deposits
Uranium (pCi/L)	2013-2016	5.27	3.11-9.89	20	0.5	Erosion of natural deposits
Trihalomethane (TTHM) (ppb)	1/16-10/16	26.6	6.3-42.9	80	N/A	Byproduct of drinking water chlorination
Haloacetic Acid (HA A5) (ppb)	1/16-10/16	6.9	2-11	60	N/A	Byproduct of drinking water disinfection.
Selenium (ppb)	3/11/15	11.25	4-16	50	50	Erosion of natural deposits; discharge chemical manufacturers and runoff from livestock lot.

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**PHG (MCLG)**	**Typical Source of Contaminant**
Chloride (ppm)	3/11/15	90	53-145	500	N/A	Runoff/leaching from natural deposits; seawater influence
Odor (units)	3/11/15	<1	<1	3 units	N/A	Natural occurring materials
Specific conductance (Umhos/cm)	3/11/15	1418	1260-1600	1600	N/A	Substance that forms ions when in water; seawater influence
Sulfate (ppm)	3/11/15	273.8	189-300	500	N/A	Runoff/leaching from natural deposits; industrial wastes

Total Dissolved Solids (ppm)	3/11/15	920	840-1040	1000	N/A	Runoff/leaching from natural deposits

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**Notification Level**	**Health Effects Language**
Boron (ppb)	3/11/15	200	100-300	1000	Some men who drink water containing boron in excess of the action level over many years may experience reproductive effects based on studies in dogs.
Vanadium (ppb)	3/11/15	6	<2.0-9.0	50	The babies of some pregnant women who drink water containing vanadium in excess of the action level may have an increased risk of developmental effects, based on studies in laboratory animals.

***Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.*

Additional General Information on Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some 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 USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons 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. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Solvang is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

						Drinking Water Source		
Parameter	**Units**	**State MCL**	**PHG (MCLG)**	**State DLR**	**Range Average**	**State Water**	**Ground Water**	**Major Sources in Drinking Water**
PRIMARY STANDARDS--Mandatory Health-Related Standards								
CLARITY								
Combined Filter Effluent Turbidity[a]	NTU	TT=<1 NTU every 4 hours TT=95% of samples <0.3 NTU			Range %	0.03 - 0.11 100%	NA NA	Soil runoff
INORGANIC CHEMICALS								
Aluminum[b]	ppb	1000 (b)	600	50	Range Average	ND - 82 60	ND ND	Residue from water treatment process; Erosion of natural deposits
Chromium +6[c,d]	ppb	10	0.02	1.0	Range Average	ND ND	0.2 - 16 2.6	Discharges from industrial manufacturers; erosion of natural deposits
Chromium (Total Cr)	ppb	50	(100)	10	Range Average	ND ND	ND - 10 1.9	Erosion of natural deposits; steel, pulp mills, and chrome plating wastes
Fluoride	ppm	2	1	0.1	Range Average	ND ND	0.12 - 0.37 0.26	Erosion of natural deposits; water additive for tooth health
Nitrate (as Nitrogen)	ppm	10	10	0.4	Range Average	0.41 0.41	ND - 3.4 0.7	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
RADIONUCLIDES								
Gross Alpha[e]	pCi/L	15	NA	3	Range Average	ND ND	ND - 13 4.7	Erosion of natural deposits
Uranium[f]	pCi/L	20	0.5	1	Range Average	NC NC	2.0 - 5.7 4.4	Erosion of natural deposits
SECONDARY STANDARDS--Aesthetic Standards								
Chloride	ppm	500	NA	--	Range Average	41 - 138 97	24 - 44 35	Runoff/leaching from natural deposits; seawater influence
Color (ACU)	Units	15	NA	--	Range Average	ND ND	ND - **23** 2.3	Naturally-occurring organic materials
Corrosivity	SI	non-corrosive	NA	--	Range Average	non-corrosive	non-corrosive	Balance of hydrogen, carbon, & oxygen in water, affected by temperature & other factors
Iron	ppb	300	NA	100	Range Average	ND ND	ND - **630** 96	Leaching from natural deposits; industrial wastes
MBAS (Foaming Agents)	ppb	500	NA	--	Range Average	ND ND	ND - 13 0.01	Municipal and industrial waste discharges
Manganese	ppb	50	NA	20	Range Average	ND ND	ND - 24 2.4	Leaching from natural deposits
Odor Threshold	Units	3	NA	1	Range Average	ND ND	1 - **4** 1.7	Naturally-occurring organic materials
Specific Conductance	µmho/cm	1600	NA	--	Range Average	374 - 757 609	780 - 1100 928	Substances that form ions when in water; seawater influence
Sulfate	ppm	500	NA	0.5	Range Average	100 100	53 - 290 193	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS)	ppm	1000	NA	--	Range Average	194 - 442 346	470 - 770 620	Runoff/leaching from natural deposits;
Lab Turbidity (ID#1) Turbidity (State Water)	NTU	5	NA	--	Range Average	0.03 - 0.13 0.06	ND - **10.7** 0.8	Soil erosion/runoff
Zinc	ppb	5000	NA	50	Range Average	ND ND	ND - 59 5.9	Runoff/leaching from natural deposits; industrial wastes
ADDITIONAL PARAMETERS (Unregulated)								
Alkalinity (Total) as $CaCO_3$ equivalents	ppm	NA	NA	--	Range Average	42 - 84 66	230 - 290 269	Runoff/leaching from natural deposits; seawater influence
Boron	ppb	NA	NL=1,000	100	Range Average	NC NC	120 - 380 230	Runoff/leaching from natural deposits; wastewater, and fertilizers/pesticides.
Calcium	ppm	NA	NA	--	Range Average	30 - 82 53	45 - 110 79	Runoff/leaching from natural deposits; seawater influence
Geosmin	ng/L	NA	NA	NA	Range Average	ND - 2 1	NC NC	An organic compound mainly produced by bacterial growth in surface water
Hardness (Total) as $CaCO_3$	ppm	NA	NA	--	Range Average	64 - 162 115	300 - 520 414	Leaching from natural deposits
Heterotrophic Plate Count[g]	CFU/mL	TT	NA	--	Range Average	0 - 2 0.4	NA NA	Naturally present in the environment
Magnesium	ppm	NA	NA	--	Range Average	17 17	45 - 60 53	Runoff/leaching from natural deposits; seawater influence

						Drinking Water Source		
Parameter	**Units**	**State MCL**	**PHG (MCLG)**	**State DLR**	**Range Average**	**State Water**	**Ground Water**	**Major Sources in Drinking Water**
2-Methylisoborneol (MIB)	ng/L	NA	NA	NA	Range	ND - 9	NC	An organic compound mainly produced by blue-green algae (cyanobacteria)
					Average	4	NC	
pH	pH Units	NA	NA	--	Range	8.0 - 8.5	7.4 - 7.7	Runoff/leaching from natural deposits; seawater influence
					Average	8.3	7.6	
Potassium	ppm	NA	NA	--	Range	4.0	2.0 - 2.6	Runoff/leaching from natural deposits; seawater influence
					Average	4.0	2.4	
Sodium	ppm	NA	NA	--	Range	87	39 - 54	Runoff/leaching from natural deposits; seawater influence
					Average	87	47	
Total Organic Carbon (TOC)[h]	ppm	TT	NA	0.30	Range	1.5 - 3.5	NA	Various natural and manmade sources.
					Average	2.3	NA	
Vanadium	ppb	NA	NL=50	3	Range	NC	ND - 19	Leaching from natural deposits; industrial wastes
					Average	NC	9	

Distribution System Water Quality

ORGANIC CHEMICALS

Total Trihalomethanes[i]	ppb	80	NA	NA	Range	31 - 60	1.1 - 35.2	By-product of drinking water chlorination
					Highest RAA	61	42.7	
Haloacetic Acids[j]	ppb	60	NA	1,2[j]	Range	4.1 - 14	ND - 8.4	By-product of drinking water chlorination
					Highest RAA	11.8	11.1	

DISINFECTION

Total chlorine residual CCWA Distribution	ppm	MRDL = 4.0	MRDLG = 4.0	--	Range	1.9 - 2.7	--	Measurement of the disinfectant used in the production of drinking water
					Average	2.3	--	
Free/total chlorine residual ID#1 Distribution	ppm	MRDL = 4.0	MRDLG = 4.0	--	Range	--	0.4 - 2.3	Measurement of the disinfectant used in the production of drinking water
					Average	--	1.61	

Abbrevations and Notes

Footnotes:

(a) Turbidity (NTU) is a is a good indicator of the effectiveness of a filtration system. Monthly turbidity values for State Water are listed in the Secondary Standards section.
(b) Aluminum has a Secondary MCL of 200 ppb.
(c) Although an individual sample may exceed the MCL, compliance is based on an RAA.
(d) ID#1 has a DDW-approved Compliance Plan in place to reduce naturally-occurring Cr6 in water produced from local supply wells.
(e) Gross alpha particle activity monitoring required every nine years for State Water; more frequent monitoring is required for some groundwater based on detected levels. Reported average and range from most recent sampling of all supply wells.
(f) Uranium monitoring is dependent on measured gross alpha particle activity.
(g) Pour plate technique -- monthly averages.
(h) TOCs are taken at the State Water treatment plant's combined filter effluent.
(i) Compliance based on the RAA of distribution system samples. Values reported are the range of all 2016 sample results and highest running annual average.
(j) Monochloroacetic Acid (MCAA) has a DLR of 2.0 ug/L while the other four Haloacetic Acids have DLR's of 1.0 ug/L.

Abbreviations

ACU = Apparent Color Units
CCWA = Central Coast Water Authority
CFU/ml = Colony Forming Units per milliliter
ID#1 = Santa Ynez River Water Conservation District, Improvement District No.1
NA = Not Applicable
NC = Not Collected
ng/L = nanograms per liter
NL = Notification Level
NTU = Nephelometric Turbidity Units
pCi/L = PicoCuries per liter
ppb = parts per billion, or micrograms per liter (µg/L)
ppm = parts per million, or milligrams per liter (mg/L)
RAA = running annual average
SI = saturation index
µmho/cm = micromhos per centimeter

Exceedance of Regulatory Standards

The summary table of analytical results confirms that water served by ID#1 met all primary drinking water standards during the 2016 reporting period. Secondary standards for iron, color, and turbidity were exceeded in samples from Wells 10 and Well 22 (iron only). Additionally, the odor threshold was exceeded in one sample from Well 19. These secondary standards are designed to protect consumers against unpleasant aesthetic affects such as color, taste, odor, or the staining of plumbing fixtures or clothing. These wells, from one of the District's River well fields, were sampled in March 2016 following an extended period of non-use and only minimally flushed to waste before sampling to avoid excessive water loss during the drought. Sampling from the other four nearby river wells and follow-up sampling from these wells yielded low to non-detect levels for these constituents, indicating that the high results were not representative of the water produced. These high results were likely due to the turbulence and inadequate well flushing at startup. Additionally, concentrations delivered to District customers would be less due to blending of multiple sources and dilution within the distribution system.

CENTRAL COAST WATER AUTHORITY

POLONIO PASS WATER TREATMENT PLANT

WATER QUALITY TABLE

COVERING THE REPORTING PERIOD OF JANUARY-DECEMBER 2016

Please see last page for key to abbreviations.

Parameter	Units	State MCL	PHG (MCLG)	State DLR	Range Average	TREATED CCWA	SOURCE STATE WATER	Major Sources in Drinking Water
PRIMARY STANDARDS--Mandatory Health-Related Standards								
CLARITY (a)								
Combined Filter Effluent Turbidity *(a)*	NTU	TT=<1 NTU every 4 hours TT=95% of samples <0.3 NTU			Range %	0.03 - 0.11 100%	NA NA	Soil runoff
INORGANIC CHEMICALS								
Aluminum	ppm	1 (b)	0.6	0.05	Range Average	ND - 0.082 0.060	ND - 0.25 0.110	Residue from water treatment process; erosion of natural deposits
Arsenic, Total	ppb	10	0.004	2	Range Average	ND ND	2.0 2.0	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Fluoride	ppm	2.0	1	0.1	Range Average	ND ND	0.12 0.12	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate as Nitrogen	ppm	10 (h)	10	0.4	Range Average	0.41 0.41	0.43 0.43	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
RADIONUCLIDES								
Gross Beta Particle	pCi/L	50	(0)	4	Range Average	ND ND	5.7 5.7	Decay of natural and man-made deposits
DISTRIBUTION SYSTEM MONITORING								
Total Chlorine Residual	ppm	MRDL = 4.0	MRDLG = 4.0	NA	Range Average	1.9 - 2.7 2.3	NA NA	Measurement of the disinfectant used in the production of drinking water
Total Coliform Bacteria *(c)*	--	5.0% of monthly samples	(0)	--	Range Average Highest	0 - 2.5% 0.4% 2.5%	NA NA NA	Naturally present in the environment
Total Trihalomethanes *(d)*	ppb	80	NA	NA	Range Average Highest LRAA	31 - 60 48 61.0	NA NA NA	By-product of drinking water chlorination
Haloacetic Acids *(d)*	ppb	60	NA	(e)	Range Average Highest LRAA	4.1 - 14 8.1 11.8	NA NA NA	By-product of drinking water chlorination
SECONDARY STANDARDS--Aesthetic Standards								
Chloride	ppm	500	NA	NA	Range Average	41 - 138 97	11 - 136 94	Runoff/leaching from natural deposits; seawater influence
Color	ACU	15	NA	NA	Range Average	ND ND	25 25	Naturally occurring organic materials
Corrosivity (Aggresivity Index)	None	non-corrosive	NA	NA	Range Average	non-corrosive non-corrosive	non-corrosive non-corrosive	Balance of hydrogen, carbon, & oxygen in water, affected by temperature & other factors
Odor Threshold	TON	3	NA	1	Range Average	ND ND	ND - 2 1.1	Naturally occurring organic materials
Specific Conductance	uS/cm	1600	NA	NA	Range Average	374 - 757 609	326 - 700 544	Substances that form ions when in water; seawater influence
Sulfate	ppm	500	NA	NA	Range Average	100 100	71 71	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS)	ppm	1000	NA	NA	Range Average	194 - 442 346	170 - 392 312	Runoff/leaching from natural deposits;
Turbidity (Monthly) *(a)*	NTU	5	NA	NA	Range Average	0.03 - 0.13 0.06	0.34 - 44 2.80	Soil runoff

Parameter	Units	State MCL	PHG (MCLG)	State DLR	Range / Average	TREATED CCWA	SOURCE STATE WATER	Major Sources in Drinking Water
ADDITIONAL PARAMETERS (Unregulated)								
Alkalinity (Total) as $CaCO_3$ equivalents	ppm	NA	NA	NA	Range	42 - 84	46 - 98	Runoff/leaching from natural deposits; seawater influence
					Average	66	74	
Calcium	ppm	NA	NA	NA	Range	30 - 82	30 - 74	Runoff/leaching from natural deposits; seawater influence
					Average	53	53	
Geosmin	ng/L	NA	NA	NA	Range	ND - 2	ND - 30	
					Average	1	3	
Hardness (Total) as $CaCO_3$	ppm	NA	NA	NA	Range	64 - 162	62 -166	Leaching from natural deposits
					Average	115	115	
Heterotrophic Plate Count *(f)*	CFU/mL	TT	NA	NA	Range	0 - 2	NA	Naturally present in the environment
					Average	0.4	NA	
Magnesium	ppm	NA	NA	NA	Range	17	16	Runoff/leaching from natural deposits; seawater influence
					Average	17	16	
Manganese, Total	ppb	NA	NA	NA	Range	ND	15	Runoff/leaching from natural deposits; seawater influence
					Average	ND	15	
2-Methylisoborneol	ng/L	NA	NA	NA	Range	ND - 9	ND - 11	
					Average	4	4	
pH	pH Units	NA	NA	NA	Range	8.0 - 8.5	7.6 - 9.4	Runoff/leaching from natural deposits; seawater influence
					Average	8.3	8.6	
Potassium	ppm	NA	NA	NA	Range	4.0	3.9	Runoff/leaching from natural deposits; seawater influence
					Average	4.0	3.9	
Sodium	ppm	NA	NA	NA	Range	87	75.	Runoff/leaching from natural deposits; seawater influence
					Average	87	75	
Total Organic Carbon (TOC) *(g)*	ppm	TT	NA	0.30	Range	1.5 - 3.5	2.8 - 6.5	Various natural and man made sources
					Average	2.3	4.0	

ABBREVIATIONS AND NOTES

Footnotes:

(a) Turbidity (NTU) is a measure of the cloudiness of the water and it is a good indicator of the effectiveness of our filtration system. Monthly turbidity values are listed in the Secondary Standards section.

(b) Aluminum has a Secondary MCL of 0.2 ppm.

(c) Total coliform MCLs: Systems that collect ≥40 samples/month no more than 5.0% of the monthly samples may be Total Coliform positive. Systems that collect <40 samples per month no more than 1 positive sample per month may be Total Coliform positive. Fecal coliform/E. coli MCLs: The occurrence of 2 consecutive Total Coliform positive samples, one of which contains fecal coliform/E. coli, constitutes an acute MCL violation.

(d) Compliance based on the running quarterly annual average of distribution system samples.

(e) Monochloroacetic Acid (MCAA) has a DLR of 2.0 ug/L while the other four Haloacetic Acids have DLR's of 1.0 ug/L.

(f) Pour plate technique

(g) TOCs are taken at the treatment plant's combined filter effluent.

(h) State MCL is 45 mg/L as NO_3, which equals 10 mg/L as N.

Abbreviations

ACU = Apparent Color Units
CCWA = Central Coast Water Authority
CFU/ml = Colony Forming Units per milliliter
DLR = Detection Level for purposes of Reporting
MCL = Maximum Contaminant Level
MCLG = Maximum Contaminant Level Goal
MRDL = Maximum Residual Disinfectant Level
MRDLG = Maximum Residual Disinfectant Level Goal
NA = Not Applicable
NTU = Nephelometric Turbidity Units
pCi/L = PicoCuries per liter
PHG = Public Health Goal
ppb = parts per billion, or micrograms per liter (µg/L)
ppm = parts per million, or milligrams per liter (mg/L)
TON = Threshold Odor Number
TT = Treatment Technique
LRAA = Locational Running Annual Average

City of Solvang Conservation Efforts
The City of Solvang has downgraded to Stage 1 Drought Regulations.
For a full list of the regulations, please see: www.cityofsolvang.com

Conservation Programs

☐ Low Flow Toilet Rebates

☐ Landscape Rebate

For more information on these programs, please contact the City of Solvang at 805-688-5575

Water Wise Facts

☐ 1 Unit of water on your water bill = One Hundred Cubic Feet (1 HCF)

☐ 1 Unit = 1 HCF = 100 Cubic Feet = 748 gallons

☐ The State of California Department of Water Resources has determined the minimum quantity of water for health & safety purposes is 50/gallons per person per day.

☐ For a family of four, 50/gallons per person per day = 8.3 Units/month.

Additional Resources
Waterwise Santa Barbara, www.waterwisesb.org

ABBREVIATIONS AND NOTES

Footnotes:

(a) Turbidity (NTU) is a measure of the cloudiness of the water and is a good indicator of the effectiveness of a filtration system. Monthly turbidity values for State Water are listed in the Secondary Standards section.
(b) Aluminum has a Secondary MCL of 200 ppb.
(c) Gross alpha particle activity monitoring required every nine years for State Water; more frequent monitoring is required for some groundwater based on detected levels. Reported average represents highest running source average.
(d) Uranium monitoring is dependent on measured gross alpha particle activity.
(e) Pour plate technique -- monthly averages.
(f) TOCs are taken at the State Water treatment plant's combined filter effluent.
(g) Total coliform MCLs: No more than 5.0% (State Water) or 1 sample (ID#1) of the monthly samples may be Total Coliform positive. All required follow-up and confirmation samples collected in response to each of the positive Total Coliform samples were absent for Total Coliform.
(h) Compliance based on the running quarterly annual average of distribution system samples. Values reported are range of all sample results and highest running annual average.
(j) Monochloroacetic Acid (MCAA) has a DLR of 2.0 ug/L while the other four Haloacetic Acids have DLR's of 1.0 ug/L.

Abbreviations

ACU = Apparent Color Units
CCWA = Central Coast Water Authority
CFU/ml = Colony Forming Units per milliliter
ID#1 = Santa Ynez River Water Conservation District, Improvement District No.1
NA = Not Applicable
NC = Not Collected
NL = Notification Level
NTU = Nephelometric Turbidity Units
pCi/L = PicoCuries per liter
ppb = parts per billion, or micrograms per liter (µg/L)
ppm = parts per million, or milligrams per liter (mg/L)
SI = saturation index
µmho/cm = micromhos per centimeter, (unit of specific conductance of water)