

2019 Consumer Confidence Report

Water System Name: **Marine Corps Logistics Base**
NEBO 3610701

Report Date: June 2020

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of both GSWC and our monitoring programs for the period of January 1 - December 31, 2019 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: NEBO Main Base: Supplied by Golden State Water Co., Barstow Ca.

Name & general location of source(s): NEBO Main Base: Supplied by Golden State Water Co., Barstow Ca

Drinking Water Source Assessment information: Wellhead Assessment March 2002 a copy can be attained at the Environmental Division Building 196 Nebo Main Base

Time and place of regularly scheduled board meetings for public participation: Meetings on Water Quality issues will be held on request of the Commanding Officer. These meetings are mandatory for all employees. For emergency drinking water issues call the trouble desk at 760-577-6220.

For more information, contact: MCLB S-F Department
Environmental Division
Compliance Branch

Phone: (760) 577-6888

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.

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.

Variations 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)

<p>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.</p> <p>MFL: million fibers per liter</p>	<p>ppq: parts per quadrillion or picogram per liter (pg/L)</p> <p>pCi/L: picocuries per liter (a measure of radiation)</p> <p>uS/cm: one millionth of a Siemen per centimeter (a measure of conductivity)</p>
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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*, that 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, 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, 7, and 8 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.

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	(In a mo.) 0	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	(In the year) 0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	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	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	2018	10	2.8	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

Copper (ppm)	2018	10	.083	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
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The 2017 amendment to domestic water supply permits require K-12 schools to be tested for lead. MCLB Nebo Annex does not contain K-12 schools, therefore does not require this testing.

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) **	2017	68	42-120	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm) **	2017	200	140-260	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.

** Analytical results from GSWC

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
Gross Alpha Particle Activity (pCi/L) **	2018	ND	ND-5.2	15	(0)	Erosion of Natural Deposits
Radium 226 (pCi/L) **	2018	ND	ND-1.4	5	0.05	Erosion of Natural Deposits
Uranium (pCi/L) **	2018	3.1	1.5-5.1	20	0.43	Erosion of Natural Deposits
Arsenic (ppb) **	2017	3.6	ND-7.2	10	0.004	Erosion of Natural Deposits; runoff from orchards; glass and electronics production wastes.
Barium (ppm) **	2017	ND	ND-0.11	1	1	Discharge of oil drilling waste and from metal refineries; Erosion of Natural Deposits
Bromide (ppb) **	2019	160	ND-250	n/a	n/a	
Chlorine [CL ₂] (ppm)	2019	1.23	0.8-1.7	[MRDL=4] (as Cl ₂)	[MRDL=4] (as Cl ₂)	Drinking water disinfectant added for treatment
Fluoride (ppm) **	2017	0.47	0.36-0.64	2.0	1	Erosion of Natural Deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Haloacetic Acid (HAA5) (ppb)	2019	5.5	3.3-7.7	60	n/a	By-product of drinking water disinfection
Nickel (ppb) **	2019	ND	ND-14	100	12	Erosion of natural deposits; discharge from metal factories
Nitrate as Nitrogen (ppm)**	2019	3.4	2-7.1	10 (as N)	10 (as N)	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Total Trihalomethanes (TTHMs) (ppb)	2019	29.5	22-37	80	n/a	By-product of drinking water disinfection

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
Alkalinity (ppm) **	2017	130	110-160	n/a	n/a	
Calcium (ppm) **	2017	60	44-81	n/a	n/a	
Chloride (ppm) **	2017	76	46-110	500	n/a	Runoff/leaching from natural deposits; seawater influence
Color (units)	2019	4.17	ND-20	15	n/a	Naturally-occurring organic materials
Iron (ppb) **	2019	ND	ND-490	300	n/a	Leaching from natural deposits; industrial wastes
Magnesium (ppb) **	2019	0.68	ND-2.3	n/a	n/a	
Odor – Threshold (units)	2019	0.96	ND-1.5	3	n/a	Naturally-occurring organic materials
pH (pH units)	2019	7.5	7.5-7.9	n/a	n/a	
Potassium (ppm) **	2017	2.5	1.9-3.0	n/a	n/a	
Specific Conductance (uS/cm) **	2017	730	500-1,000	1600	n/a	Substances that form ions when in water; seawater influence
Sulfate (ppm) **	2017	110	54-190	500	n/a	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS) (ppm) **	2017	460	300-670	1000	n/a	Runoff/leaching from natural deposits
Turbidity (units)	2019	0.34	0.1-1.1	5	n/a	Soil runoff

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 (ppm)	2018	.22	.19 – .26	1	The babies of some pregnant women who drink water containing boron in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals
Hexavalent Chromium (ppb)	2018	.27	ND - 0.54	10	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits.
Vanadium (ppb)	2018	4.7	4.4 – 4.9	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 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.

** Analytical results from GSWC

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).

Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider

Lead-Specific Language for Community Water Systems: 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. Golden State Water Company 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>.