Start Date: 01 Jan 2019
End Date: 31 Dec 2019

DRINKING WATER ANALYSIS SUMMARY
Voluntary Monitoring - Detected Contaminants

System: MCAS New River
PWSID: 04-67-042

| Contaminants | Amount Detected* | Unit of Measure | Range | |
|---|---|---|---|---|
| | | | Low | High |
| **Finished Drinking Water Detections** | | | | |
| Explosive (Munitions) Constituents | | | | |
| 2,4,6-Trinitrotoluene | 0.15 | ug/L | Only Detection | |
| Perchlorate | 0.357 | ug/L | 0.15 | 0.48 |
| Inorganic Contaminants | | | | |
| Arsenic | 0.97 | ug/L | Only Detection | |
| Barium | 0.4925 | ug/L | 0.46 | 0.52 |
| Calcium | 23,500 | ug/L | 23,000 | 24,000 |
| Chlorate | 550 | ug/L | 330 | 780 |
| Chloride | 31,000 | ug/L | 31,000 | 31,000 |
| Lead | 0.14 | ug/L | Only Detection | |
| Magnesium | 1,625 | ug/L | 1,500 | 1,700 |
| Potassium | 5,725 | ug/L | 5,300 | 6,100 |
| Selenium | 0.6 | ug/L | 0.6 | 0.6 |
| Sodium | 101,750 | ug/L | 93,000 | 110,000 |
| Strontium | 86 | ug/L | 77 | 94 |
| Vanadium | 0.33 | ug/L | 0.33 | 0.33 |
| PFAS | | | | |
| No Detections | | | | |
| Synthetic Organic Contaminants | | | | |
| Chlordane | 0.012 | ug/L | Only Detection | |
| Di(2-ethylhexyl)phthalate | 0.82 | ug/L | Only Detection | |
| Total Organic Carbon | | | | |
| Total Organic Carbon | 1600 | ug/L | 1600 | 1600 |
| Volatile Organic Contaminants | | | | |
| Bromodichloromethane | 9.63 | ug/L | 9.2 | 10 |
| Bromoform | 0.543 | ug/L | 0.41 | 0.64 |
| Chloroform | 12.3 | ug/L | 12 | 13 |
| Dibromochloromethane | 5.47 | ug/L | 4.8 | 5.9 |
| **Raw Groundwater Detections** | | | | |
| Explosive (Munitions) Constituents | | | | |
| Perchlorate | 0.339 | ug/L | 0.028 | 0.91 |
| Inorganic Contaminants | | | | |
| Barium | 1.70 | ug/L | 0.34 | 3.7 |
| Cadmium | 0.047 | ug/L | Only Detection | |
| Calcium | 74,115 | ug/L | 63,000 | 91,000 |
| Chlorate | 4.90 | ug/L | 2.6 | 6.5 |
| Chloride | 21,988 | ug/L | 8,300 | 66,000 |
| Cobalt | 0.129 | ug/L | 0.12 | 0.14 |
| Copper | 23.4 | ug/L | 4.2 | 33 |
| Iron | 49 | ug/L | 19 | 92 |
| Lead | 0.0695 | ug/L | 0.063 | 0.08 |
| Magnesium | 5,092 | ug/L | 4,100 | 6,300 |
| Manganese | 2.26 | ug/L | 1.1 | 4.2 |
| Nickel | 0.751 | ug/L | 0.43 | 1.1 |
| Potassium | 9,035 | ug/L | 5,500 | 15,000 |
| Selenium | 2.23 | ug/L | 0.6 | 5.2 |
| Sodium | 31,154 | ug/L | 13,000 | 89,000 |
| Strontium | 269 | ug/L | 220 | 370 |
| Vanadium | 0.339 | ug/L | 0.3 | 0.39 |
| Zinc | 16.4 | ug/L | 7 | 63 |

DRINKING WATER ANALYSIS SUMMARY
Voluntary Monitoring - Detected Contaminants



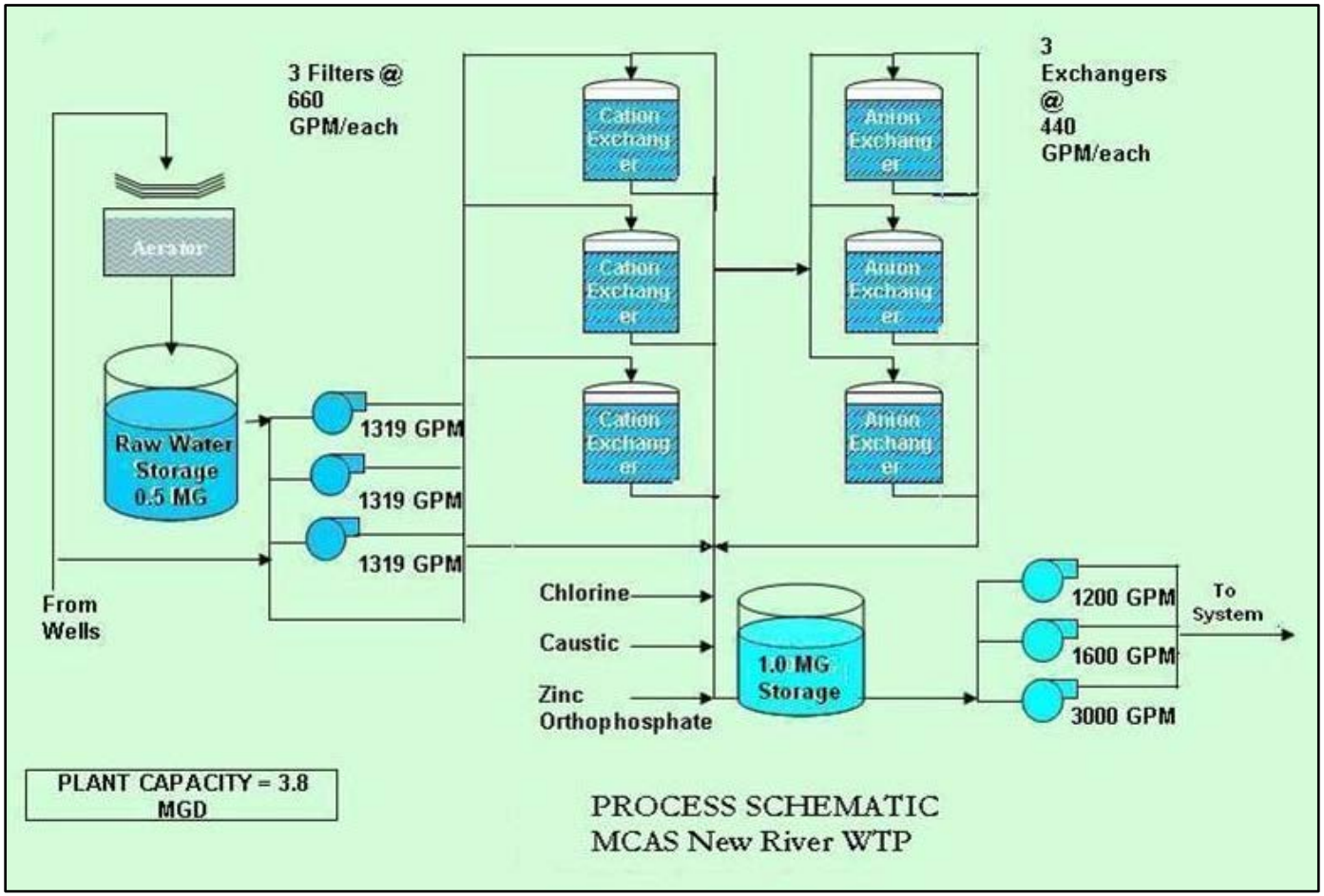
| | | | | |
|---|---|---|---|---|
| **PFAS** | | | | |
| Perfluorohexanoic Acid | 0.00104 | ug/L | 0.00103 | 0.00105 |
| **Synthetic Organic Contaminants** | | | | |
| Alachlor | 0.048 | ug/L | Only Detection | |
| Atrazine | 0.027 | ug/L | Only Detection | |
| Butachlor | 0.074 | ug/L | Only Detection | |
| Chlordane | 0.0141 | ug/L | 0.0084 | 0.021 |
| Di(2-ethylhexyl)adipate | 0.85 | ug/L | 0.7 | 1 |
| Di(2-ethylhexyl)phthalate | 1.16 | ug/L | 0.78 | 3.3 |
| Dieldrin | 0.15 | ug/L | Only Detection | |
| Heptachlor | 0.06 | ug/L | Only Detection | |
| Hexachlorocyclopentadiene | 0.23 | ug/L | Only Detection | |
| Methoxychlor | 0.091 | ug/L | Only Detection | |
| Metolachlor | 0.036 | ug/L | Only Detection | |
| Metribuzin | 0.035 | ug/L | Only Detection | |
| Propachlor | 0.050 | ug/L | Only Detection | |
| Simazine | 0.057 | ug/L | Only Detection | |
| **Total Organic Carbon** | | | | |
| Total Organic Carbon | 2663 | ug/L | 1500 | 4300 |
| **Volatile Organic Contaminants** | | | | |
| No Detections | | | | |

* Average amount of all detections

NOTE - This database contains information about MCB Camp Lejeune's drinking water distribution systems and raw water supply. It was developed only to assist the Base in managing and maintaining analytical data concerning chemicals detected in drinking water. While EMD has made every effort to ensure the completeness and accuracy of the database, some errors and omissions may remain. Therefore, the user should always refer to the original report to ensure maximum accuracy and completeness.

# MCAS New River Water Treatment Process

Groundwater is pumped from the drinking water supply wells to a water reservoir located at the MCAS New River Water Treatment Plant. Water is pumped to the top of the reservoir and cascades down providing aeration. This water is then pumped to a series of cation and anion exchangers (softeners) to remove particles. Chlorine, caustic and zinc orthophosphate are added to the water before it enters the finished water reservoir. When water is needed by customers, it is pumped from the reservoir and distributed throughout the MCAS New River Community water system.



# Source Water Assessment Program (SWAP) Results

The North Carolina Department of Environmental Quality (NCDEQ), Public Water Supply Section (PWSS), Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to Potential Contaminant Sources (PCSs). The results of the assessment are available in SWAP reports that include maps, background information, and a relative susceptibility rating of Higher, Moderate or Lower. The relative susceptibility rating of each source for the MCAS New River Water Treatment System was determined by combining the contaminant rating (number and location of PCSs within the assessment area) and inherent vulnerability rating (i.e., characteristics or existing conditions of the well or watershed and its delineated assessment area). The assessment findings based on the SWAP report completed on 24 April 2017 are summarized in the table below:

| MCAS New River Drinking Water Supply Wells | |
|---|---|
| **Source Name** | **Susceptibility Rating** |
| VL 101 | Moderate |
| VL 102 | Moderate |
| VL 103 | Moderate |
| VL 104 | Lower |
| VL 105 | Lower |
| VL 106 | Moderate |
| VL 107 | Moderate |
| VL 109 | Lower |

**It is important to understand that a susceptibility rating of "higher" does not imply poor water quality, only the system's potential to become contaminated by PCSs in the assessment area.**

The complete SWAP report for the MCAS New River Water Treatment System may be viewed on the web at http://www.ncwater.org/?page=600. In order to access this report you will need to enter either the system name or PWS ID. Both have been provided below. Please note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this website may differ from the results that were available at the time this report was prepared.

**System Name: USMC Lejeune--New River Air St**

**PWS ID: 0467042**

# Water Conservation

**Did** you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? You can play a role in conserving water by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever possible. It is not hard to conserve water. Small changes can make a big difference. Here are a few tips:

- Take short showers – a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Check every faucet in your home for leaks. Just a slow drip can waste 15-20 gallons a day.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Water plants only when necessary and adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Don't run the hose while washing your car. Use a bucket of water and a quick hose rinse at the end or wash vehicles at a carwash that recycles its water. Saves 150 gallons each time.

Teach your kids about water conservation to ensure a future generation that uses water wisely.
Visit www.epa.gov/watersense for more information.

**R**emember, when you conserve water you also conserve energy!