

OCL ANALYTICAL SERVICES

OFFERS COMPLETE ANALYSIS OF:
WATER
WASTEWATER

Analysis we routinely provide:

Microbiology/Bacteriology

Wet Chemistry

Physical Factors

Metals

Inorganic Chemicals

Organic Chemicals

Radiological

Asbestos

We can assist you in identifying your exact testing requirements.

Please call **(845) 733-1557** for additional information or price quotes.

Directions to OCL:

From Middletown, NY & Orange County:
Take route 17 West to exit 116, Bloomingburg. At end of exit ramp, go straight onto Goshen Turnpike. We are located about 500 feet up on the right.

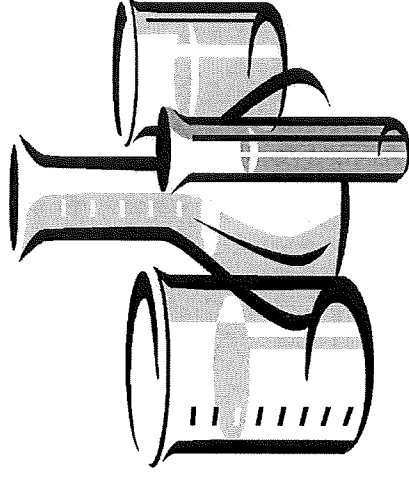
From Monticello, NY & Sullivan County:
Take route 17 East to exit 116, Bloomingburg. Turn left onto route 17K. Go under route 17 overpass and take first right onto Goshen Turnpike. We are located about 500 feet on the right.

From Milford, PA or Port Jervis, NY:
Take I-84 East to route 17 West. Follow route 17 West to exit 116, Bloomingburg. At end of exit ramp, go straight onto Goshen Turnpike. We are located about 500 feet up on the right.

OR

Take route 209 North to route 17 West. Follow route 17 East to exit 116, Bloomingburg. Turn left onto route 17K. Go under route 17 overpass and take first right onto Goshen Turnpike. We are located about 500 feet on the right.

OCL ANALYTICAL SERVICES



A STATE CERTIFIED
ENVIRONMENTAL TESTING
LABORATORY

35 Goshen Turnpike
Bloomingburg, NY 12721
Phone (845) 733 1557
Fax (845) 733 1944

DRINKING WATER STANDARDS

Drinking water standards are established for contaminants which may have adverse effects on people's health and for contaminants which have aesthetic effects such as taste, odor and staining. Drinking water standards are usually established through Maximum Contamination Levels (MCL). The MCL is the maximum level of contaminant allowed in a water system. It is usually expressed in:

milligrams per liter (mg/L) = parts per million
micrograms per liter (ug/L) = parts per billion

Additional Information

US EPA website: <http://www.epa.gov>

NYS Dept. of Health: <http://www.health.state.ny.us>
Pesticide Database:

<http://www.pesticideinfo.org/Index.html>

Department of Environmental Conservation:

<http://www.dec.state.ny.us>

Alkalinity: (No designated limit)

Primarily a function of carbonate, bicarbonate and hydroxide, alkalinity measures the acid neutralizing capacity of water.

Alkalinity has a major importance in connection with the corrosion control of water.

Coliform Bacteria: (MCL = Absence or less than 1.1)
This test evaluates for coliform bacteria, which is widely distributed in the environment and E. Coli which is found in the feces of warm blooded animals.

The presence of coliform is indicative of contamination. All water systems should be free of total coliform and E. Coli to be considered safe. Therefore the presence of any coliform is cause for concern and corrective action should be taken. Chlorine bleach or ultra violet light disinfection is recommended.

Chloride: (MCL: 250 mg/L)

Chloride is suspected of being a contributor to high blood pressure. High concentrations may contribute to the deterioration of domestic plumbing and water heaters. Water can become contaminated by natural salt deposits, highway road salt, and water softeners. Reverse osmosis is the recommended treatment.

Conductivity: (Normal range 50-1500 umhos/cm)
Conductivity measures the degree of mineralization of water. The conductivity value is used in the determination of corrosivity.

Copper: (MCL: 1.3 mg/L)

A common source of contamination is copper piping. Corrosive water will cause leaching. High levels may impart a bitter taste to the water. Treat by neutralizing corrosive water.

Corrosivity: (Normal range is -1 to +1)

Corrosivity is a complex characteristic of the relationship between pH, alkalinity, calcium hardness, temperature and total dissolved solids or conductivity. A value lower than negative 1 (-1) indicates corrosive water. Corrosive water can gradually weaken and destroy household piping and leach metals such as lead, copper, and iron into tap water. Water with a value higher than positive 1 (+1) may be prone to scaling and calcium buildup. Treat by neutralization.

Hardness: (0-60mg/L soft water; 61-120mg/L moderately hard; 121-180mg/L hard water)

Hardness measures the amount of dissolved calcium and magnesium carbonates. Very hard water increases soap consumption and may precipitate in appliances and pipes reducing their capacity. Hardness has no adverse health effects. Treat with a water softener.

Hydrogen Sulfide: (No standard)

Hydrogen Sulfide is a gas. It is easily identifiable by a "rotten egg" odor. Hydrogen sulfide may be produced during the decay of iron bacteria. Treat with oxidation and filtration.

Iron: (MCL: 0.3 mg/L)

Iron occurs naturally in many groundwater supplies. High levels may cause red or brown staining to fixtures and laundry or impart a metallic taste. Treat by neutralizing corrosive water or with an iron filter.

Lead: (MCL: 0.015 mg/L)

Lead exposure can cause serious health effects. Water may be contaminated from rocks and soil, lead pipes, lead in solder, water pump fittings, discarded lead batteries, landfills and hazardous waste sites.

Manganese: (MCL: 0.3 mg/L)

Manganese occurs naturally in many groundwater supplies. High levels may cause black or gray discoloration to plumbing fixtures and laundry or impair the taste of coffee and tea. Treat by neutralizing corrosive water or with an iron filter.

Nitrate: (MCL: 10 mg/L); **Nitrite**: (MCL: 1 mg/L)
Many commercial fertilizers contain nitrogen in the form of nitrates. Excess nitrate can leach into the ground and contaminate water supplies. Within the digestive system, nitrate is converted into very toxic nitrite and can interfere with the oxygen carrying capacity of the blood. Pregnant women and infants should not consume water with nitrate or nitrite above the MCL to avoid methemoglobinemia or blue baby syndrome. Treat with reverse osmosis or ion exchange.

Pesticides (EPA 525.2)

Pesticides are manufactured by humans. Many of them are known carcinogens. They may enter drinking water supplies as a result of an accidental spill, illegal dumping, industrial discharge, improper field applications and excessive rainfall after application. The health effects of pesticides depend on their chemical characteristic. Treatment includes activated carbon filtration, reverse osmosis and distillation.

pH: (Normal range is 6.5 to 8.5)

The term pH indicates whether water is acidic or basic. The scale is from 0 to 14, with 7.0 being neutral. Low pH values tend to increase corrosivity making many substances such as metals and hardness minerals more soluble.

Sodium: (No standard)

Sodium occurs naturally in almost all groundwater. Excessive sodium intake increases the risk of hypertension. Concentrations of less than 20 mg/L are recommended for sodium restricted individuals. Most waters containing high levels of sodium are due to water softeners containing sodium chloride. Home water softeners add significant sodium to the water because they exchange sodium for the hardness minerals. The recommended treatment is reverse osmosis or a potassium chloride softener.

Total Dissolved Solids: (MCL: 500 mg/L)

Total Dissolved Solids (TDS) is a measure of all dissolved inorganic material in water. Excess TDS may impart a mineral taste and have possible health effects. The TDS value is used in the determination of corrosivity.

Volatile Organic Compounds (VOC):

There are 52 aromatic and halogenated petroleum compounds which make up these contaminants. Possible sources of contamination include oil, gasoline, dry cleaning fluids, and industrial solvents. Health effects are varied, including known carcinogens and birth defects. Some chemicals can be removed with activated carbon filtration. Other chemicals require activated carbon filtration in combination with reverse osmosis or distillation.

www.oceanalytical.com