

# Water Quality Analysis – Revision for 2016

The following chart lists the highest recorded level in Michigan City in 2016 and the highest allowed by the USEPA. Michigan City water has met all EPA requirements.

<u>DATE</u>	<u>CONTAMINANT</u>	<u>MCL</u>	<u>MCLG</u>	<u>UNIT</u>	<u>RESULT</u>	<u>MIN</u>	<u>MAX</u>	<u>SITES OVER VIOLATES</u>	<u>LIKELY SOURCES</u>	
								<u>AL</u>		
10/28/2016	Barium	2	2	mg/l	0.02	0.02	0.02	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	
Valid until 12/31/2016	Lead (90th percentile)	15 (AL)	0	ug/l	12	ND	120	1	No	Corrosion of household plumbing systems. Erosion of natural deposits
Valid until 12/31/2016	Copper (90th percentile)	1.3 (AL)	1.3	mg/l	0.29	0.015	0.480	0	No	Erosion of natural deposits; Corrosion of household plumbing systems: Leaching from wood preservatives
2016	Fluoride	4	4	mg/l		0.80	1.00		No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharges from fertilizer and aluminum factories
10/28/2016	Nitrate-Nitrite (as N)	10	10	mg/l		0.33			No	Erosion of natural deposits, runoff from fertilizers, leaching from septic systems-sewers
2016	Total Trihalomethanes	80	0	ug/l	8.2	0.0	12.8		No	By-product of drinking water chlorination
2016	Total Haloacetic Acids	60	0	ug/l	1.3	0.0	4.5		No	By-product of drinking water chlorination
2016	Total Organic Carbon	TT	TT	mg/l		ND	1.6		No	Naturally present in the Environment
10/28/2016	Sodium	N/A	N/A	mg/l	7.6				No	Metals; Erosion of natural deposits
2016	Turbidity (lowest percentage)	TT **	TT**	%	100%	100%	100 %		No	Soil runoff
2016	Turbidity (Maximum level)	1	1	NTU	0.07	0.04	1.00		No	Soil runoff
2016	Chloramine residual	4 MRDL		mg/l	0.79	0.01	1.50		No	Water additive (disinfectant) used to control microbiological organisms
2016	Total Coliform 40/month	0	0	mg/l	0	0%	0%		No	Naturally present in environment

## Definitions

**MCL:** Maximum Contaminant Level, the highest level of a contaminant that is allowed in drinking water.

**MCLG:** Maximum Contaminant Level Goal, the level of a contaminant in drinking water below which there is no known or expected risk to health.

**MRDL:** Maximum Residual Disinfectant Level, the highest level of disinfectant allowed in drinking water.

**MRDLG:** Maximum Residual Disinfectant Level Goal, the level of drinking water disinfectant below which there is no known or expected risk to health.

**AL:** Action level, the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**TT:** Treatment Technique, a required process intended to reduce the level of a contaminant in drinking water.

**NTU:** Nephelometric Turbidity Unit, is the measure of clarity of the water

**mg/l:** milligrams per liter, a measurement for concentration equivalent to ppm = one part per million

**ug/l:** micrograms per liter, measurement for concentration equivalent to ppb = one part per billion

**pCi/l:** picocuries per liter, a measurement of radiation

**P\*:** Potential violation, one that is likely to occur in the near future, subject to other applicable requirements.

**ND:** Not detected, the result was not detected at or below the analytical method detection level.

**Special Note on Lead:** 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. Our system 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>.

**Special Note on Turbidity:** \*\* The turbidity treatment technique (TT) requires that at least 95% of the total combined effluent turbidity samples shall not exceed 0.3 NTU (1.0 NTU for slow sand and diatomaceous earth filtration systems). At least 95% is required to be in compliance. In addition, the maximum turbidity level cannot exceed 1.0 NTU at anytime.

We recently completed a round of UCMR monitoring as required by the USEPA. If you should have any questions regarding the UCMR monitoring, please contact our office at (219) 874-3228.

Due to one of our Lead samples over the Action Level at the 90th percentile, at 1.2 mg/l this has to be reported in this report. Contact our office at (219) 874-3228 if you have any questions.