

The method detection limit (MDL) is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results.

The Routine Reporting Limit (RL) is the lowest reported value for a particular parameter. This value is based on the lowest calibration point for most parameters. When a calibration curve is not utilized, the RL is based on the limit of the equipment utilized for analysis.

All values assume that samples are run at no dilution.

Drinking Water Parameters

Metals				
Analyte	Method	Technique	Calculated MDL	Routine Reporting Limit
ICP 7400				
ALUMINUM	EPA 200.7	ICP	124 µg/l	150 µg/l
BARIUM	EPA 200.7	ICP	1.6 µg/l	10 µg/l
BERYLLIUM	EPA 200.7	ICP	1.4 µg/l	1 µg/l
CADMIUM	EPA 200.7	ICP	1.2 µg/l	4 µg/l
CALCIUM	EPA 200.7	ICP	48.3 µg/l	50 µg/l
CHROMIUM	EPA 200.7	ICP	0.5 µg/l	4 µg/l
COPPER	EPA 200.7	ICP	2.1 µg/l	10 µg/l
IRON	EPA 200.7	ICP	11.2 µg/l	50 µg/l
MAGNESIUM	EPA 200.7	ICP	8.3 µg/l	50 µg/l
MANGANESE	EPA 200.7	ICP	0.8 µg/l	4 µg/l
NICKEL	EPA 200.7	ICP	0.7 µg/l	5 µg/l
SILVER	EPA 200.7	ICP	1.0 µg/l	2 µg/l
ZINC	EPA 200.7	ICP	1.3 µg/l	30 µg/l
ALUMINUM	EPA 200.8	ICP/MS	2.5 µg/l	10 µg/l
ANTIMONY	EPA 200.8	ICP/MS	0.08 µg/l	0.4 µg/l
ARSENIC	EPA 200.8	ICP/MS	0.50 µg/l	0.5 µg/l
BARIUM	EPA 200.8	ICP/MS	0.12 µg/l	0.5 µg/l
BERYLLIUM	EPA 200.8	ICP/MS	0.13 µg/l	0.3 µg/l
CADMIUM	EPA 200.8	ICP/MS	0.06 µg/l	0.5 µg/l
CHROMIUM	EPA 200.8	ICP/MS	0.28 µg/l	0.5 µg/l
COPPER	EPA 200.8	ICP/MS	0.07 µg/l	0.5 µg/l
LEAD	EPA 200.8	ICP/MS	0.06 µg/l	0.5 µg/l
MANGANESE	EPA 200.8	ICP/MS	0.09 µg/l	0.5 µg/l
MERCURY	EPA 200.8	ICP/MS	0.09 µg/l	0.2 µg/l
NICKEL	EPA 200.8	ICP/MS	0.08 µg/l	0.5 µg/l
SELENIUM	EPA 200.8	ICP/MS	0.53 µg/l	2.5 µg/l
SILVER	EPA 200.8	ICP/MS	0.18 µg/l	0.5 µg/l
THALLIUM	EPA 200.8	ICP/MS	0.05 µg/l	0.3 µg/l
URANIUM	EPA 200.8	ICP/MS	0.05µg/l	0.5 µg/l
ZINC	EPA 200.8	ICP/MS	1.03 µg/l	10 µg/l
ANTIMONY	EPA 200.9	GFAA, PLATFORM	0.72 µg/l	2 µg/l
ARSENIC	EPA 200.9	GFAA, PLATFORM	0.30 µg/l	0.5 µg/l
LEAD	EPA 200.9	GFAA, PLATFORM	0.25 µg/l	1 µg/l
SELENIUM	EPA 200.9	GFAA, PLATFORM	0.72 µg/l	1.3 µg/l
THALLIUM	EPA 200.9	GFAA, PLATFORM	0.24 µg/l	0.3 µg/l
MERCURY	EPA 245.1	MANUAL COLD VAPOR	0.06 µg/l	0.2 µg/l
CALCIUM	SM 3111B	FLAME ATOMIC ABSORPTION	0.063 mg/l	0.1 mg/l
COPPER	SM 3111B	FLAME ATOMIC ABSORPTION	0.020 mg/l	0.05 mg/l
IRON	SM 3111B	FLAME ATOMIC ABSORPTION	0.018 mg/l	0.1 mg/l
MANGANESE	SM 3111B	FLAME ATOMIC ABSORPTION	0.023 mg/l	0.05 mg/l
SODIUM	SM 3111B	FLAME ATOMIC ABSORPTION	0.029 mg/l	0.1 mg/l
CALCIUM	SM 3500-Ca B	TITRIMETRIC (EDTA)	N.A.	2.50 mg/l
ALKALINITY	SM 2320 B	TITRIMETRIC	N.A.	1 mg/l
AMMONIA	SM 4500 NH3 D	SELECTIVE METHOD	0.02 mg/l	0.05 mg/l
CALCIUM HARDNESS	EPA 200.7	ICP (7400)	0.121 mg/l	1 mg/l
CALCIUM HARDNESS	SM 3500-Ca B	TITRIMETRIC (EDTA)	N.A.	1 mg/l
CHLORIDE	SM 4500-Cl B	ARGENTIOMETRIC	N.A.	1 mg/l
CHLORINE, FIELD	SM 4500CLG	DPD COLORIMETRIC	N.A.	0.05 mg/l
CHLORINE, FREE RES.	SM 4500-Cl G	DPD COLORIMETRIC	0.02 mg/l	0.05 mg/l

GENERAL CHEMISTRY:				
Analyte	Method	Technique	Calculated MDL	Routine Reporting Limit
CHLORINE, TOT. RES.	SM 4500-Cl G	DPD COLORIMETRIC	0.01 mg/l	0.05 mg/l
COLOR	SM 2120 B	COLORIMETRIC	N.A.	5 CU
CONDUCTIVITY	SM 2510 B	SPECIFIC CONDUCTANCE	N.A.	15 micromho/cm
FLUORIDE	SM 4500-F C	ION SELECTIVE ELECTROD	0.01 mg/l	0.05 mg/l
HARDNESS, TOTAL	EPA 200.7	ICP (7400)	0.150 mg/l	1 mg/l
HARDNESS, TOTAL	SM 2340 C	TITRIMETRIC (EDTA)	N.A.	1 mg/l
NITRATE/NITRITE	10-107-04-1-A	LACHAT QUICKCHEM METHOD	0.04 mg/l	0.05 mg/l
NITRITE	SM 4500-NO ₂ B	SPECTROPHOTOMETRIC	0.001 mg/l	0.005 mg/l
NITRITE	10-107-04-1-A	LACHAT QUICKCHEM METHOD	0.03 mg/l	0.20 mg/l
ODOR	SM 2150 B	CONSISTENT SERIES	N.A.	1 TON
ORTHO PHOSPHATE	SM 4500-P E	COLORIMETRIC, ASCORBIC ACID, SINGLE REAGENT	0.005 mg/l	0.01 mg/l
pH	HACH 10076	Method 10076	N.A.	N.A.
pH	SM 4500H+B	ELECTROMETRIC	N.A.	N.A.
SILICA	SM 4500-SiO ₂ C	COLORIMETRIC	0.10 mg/l	0.1 mg/l
SULFATE	SM 4500 SO ₄ ²⁻ E	TURBIDIMETRIC	0.43 mg/l	5 mg/l
SURFACTANTS	SM 5540 C	METHYLENE BLUE	0.04 mg/l	0.10 mg/l
TDS	SM 2540 C	GRAVIMETRIC @ 180°C	N.A.	1 mg/l
TEMPERATURE	SM 2550 B	THERMOMETRIC	N.A.	N.A.
TOTAL ORGANIC CARBON	SM 5310C	PERSULFATE-UV	0.70 mg/l	1.00 mg/l
TURBIDITY	SM 2130 B	NEPHELOMETRIC	N.A.	0.05 NTU

Non-potable Parameters

METALS:				
Analyte	Method	Technique	Calculated MDL	Routine Reporting Limit
ICP 7400				
ALUMINUM	EPA 200.7	ICP	124 µg/l	150 µg/l
ANTIMONY	EPA 200.7	ICP	3.8 µg/l	10 µg/l
ARSENIC	EPA 200.7	ICP	5.2 µg/l	8 µg/l
BARIUM	EPA 200.7	ICP	1.6 µg/l	10 µg/l
BERYLLIUM	EPA 200.7	ICP	1.4 µg/l	4 µg/l
BORON	EPA 200.7	ICP	2.6 µg/l	50 µg/l
CADMIUM	EPA 200.7	ICP	1.2 µg/l	4 µg/l
CALCIUM	EPA 200.7	ICP	48.3 µg/l	50 µg/l
CHROMIUM	EPA 200.7	ICP	0.5 µg/l	4 µg/l
COBALT	EPA 200.7	ICP	0.3 µg/l	4 µg/l
COPPER	EPA 200.7	ICP	2.1 µg/l	10 µg/l
IRON	EPA 200.7	ICP	11.2 µg/l	50 µg/l
LEAD	EPA 200.7	ICP	5.6 µg/l	10 µg/l
MAGNESIUM	EPA 200.7	ICP	8.3 µg/l	50 µg/l
MANGANESE	EPA 200.7	ICP	0.8 µg/l	4 µg/l
MOLYBDENUM	EPA 200.7	ICP	0.6 µg/l	5 µg/l
NICKEL	EPA 200.7	ICP	0.7 µg/l	5 µg/l
SELENIUM	EPA 200.7	ICP	6.3 µg/l	10 µg/l
SILVER	EPA 200.7	ICP	1.0 µg/l	2 µg/l
THALLIUM	EPA 200.7	ICP	4.2 µg/l	10 µg/l
TIN	EPA 200.7	ICP	1.1 µg/l	20 µg/l
TITANIUM	EPA 200.7	ICP	0.5 µg/l	5 µg/l
VANADIUM	EPA 200.7	ICP	0.7 µg/l	4 µg/l
ZINC	EPA 200.7	ICP	1.3 µg/l	30 µg/l
ALUMINUM	EPA 200.8	ICP/MS	2.5 µg/l	10 µg/l
ANTIMONY	EPA 200.8	ICP/MS	0.08 µg/l	0.4 µg/l
ARSENIC	EPA 200.8	ICP/MS	0.50 µg/l	0.5 µg/l
BARIUM	EPA 200.8	ICP/MS	0.12 µg/l	0.5 µg/l
BERYLLIUM	EPA 200.8	ICP/MS	0.13 µg/l	0.3 µg/l
CADMIUM	EPA 200.8	ICP/MS	0.06 µg/l	0.5 µg/l
CHROMIUM	EPA 200.8	ICP/MS	0.28 µg/l	0.5 µg/l
COBALT	EPA 200.8	ICP/MS	0.07 µg/l	0.5 µg/l
COPPER	EPA 200.8	ICP/MS	0.07 µg/l	0.5 µg/l
LEAD	EPA 200.8	ICP/MS	0.06 µg/l	0.5 µg/l
MANGANESE	EPA 200.8	ICP/MS	0.09 µg/l	0.5 µg/l

GENERAL CHEMISTRY:				
Analyte	Method	Techinque	Calculated MDL	Routine Reporting Limit
MERCURY	EPA 200.8	ICP/MS	0.09 µg/l	0.2 µg/l
MOLYBDENIUM	EPA 200.8	ICP/MS	0.18 µg/l	0.5 µg/l
NICKEL	EPA 200.8	ICP/MS	0.08 µg/l	0.5 µg/l
SELENIUM	EPA 200.8	ICP/MS	0.53 µg/l	2.5 µg/l
SILVER	EPA 200.8	ICP/MS	0.18 µg/l	0.5 µg/l
THALLIUM	EPA 200.8	ICP/MS	0.05 µg/l	0.3 µg/l
ZINC	EPA 200.8	ICP/MS	1.03 µg/l	10 µg/l
MERCURY	EPA 245.1	MANUAL COLD VAPOR	0.06 µg/l	0.2 µg/l
COPPER	SM 3111B	FLAME ATOMIC ABSORPTION	0.020 mg/l	0.05 mg/l
IRON	SM 3111B	FLAME ATOMIC ABSORPTION	0.018 mg/l	0.1 mg/l
MANGANESE	SM 3111B	FLAME ATOMIC ABSORPTION	0.023 mg/l	0.05 mg/l
POTASSIUM	SM 3111B	FLAME ATOMIC ABSORPTION	0.029 mg/l	0.1 mg/l
SODIUM	SM 3111B	FLAME ATOMIC ABSORPTION	0.029 mg/l	0.1 mg/l
ZINC	SM 3111B	FLAME ATOMIC ABSORPTION	0.013 mg/l	0.1 mg/l
CALCIUM	SM 3500-Ca B	TITRIMETRIC (EDTA)	N.A.	2.50 mg/l
ALKALINITY	SM 2320 B	TITRIMETRIC	N.A.	1 mg/l
AMMONIA	SM 4500 NH3 D	SELECTIVE METHOD	0.02 mg/l	0.05 mg/l
BIOCHEMICAL OXYGEN DEMAND,5	SM 5210 B	5 DAY DO DEPLETION	N.A.	2 mg/l
CALCIUM HARDNESS	SM 3500-Ca B	TITRIMETRIC (EDTA)	N.A.	1 mg/l
CARBON DIOXIDE	SM 406 16th Ed.	TITRIMETRIC	N.A.	1 mg/l
CARBONACEOUS BOD	SM 5210 B	DO DEPLETION NITRIF. INHIBITION	N.A.	2 mg/l
CHEMICAL OXYGEN DEMAND	HACH 8000	HACH REACTOR DIGESTION	5.8 mg/l	10 mg/l
CHLORIDE	SM 4500-Cl B	ARGENTOMETRIC	N.A.	1 mg/l
CHLORINE TOTAL RES.	SM 4500-Cl G	DPD COLORIMETRIC	0.01 mg/l	0.05 mg/l
CHLORINE, FIELD	SM 4500-Cl G	DPD COLORIMETRIC	N.A.	0.05 mg/l
CHROMIUM, HEXAVALENT	SM 3500-Cr B	COLORIMETRIC DPC	0.01 mg/l	0.01 mg/l
COLOR	SM 2120 B	COLORIMETRIC Pt-Co	N.A.	5 CU
CONDUCTIVITY	SM 2510 B	SPECIFIC CONDUCTANCE	N.A.	15 micromho/cm
HARDNESS, TOTAL	EPA 200.7	ICP (7400)	0.150 mg/l	1 mg/l
HARDNESS, TOTAL	SM 2340 C	TITRIMETRIC (EDTA)	N.A.	1 mg/l
KJELDAHL, NITROGEN	Lachat 10-107-06-2-D	FLOW INJECTION ANAY/BLOCK DIGESTOR METHOD	0.085 mg/l	0.50 mg/l
NITRATE/NITRITE, NITROGEN	EPA 353.2	AUTOMATED COLORIMETRY SPECTROPHOTOMETRIC,	0.04 mg/l	0.20 mg/l
NITRITE, NITROGEN	SM 4500-NO ₂ B	MANUAL	0.001 mg/l	0.005 mg/l
ODOR	SM 2150 B	CONSISTENT SERIES	N.A.	1 TON
HEXANE EXTRACTABLE MATERIAL (HEM)	EPA 1664A	GRAVIMETRIC HEXANE	0.77 mg/l	5 mg/l
ORTHOPHOSPHATE	SM 4500-P E	ASCORBIC ACID, MANUAL SINGLE REAGENT	0.005 mg/l	0.01 mg/l
SILICA GEL TREATED HEXANE EXTRACTABLE MATERIAL (SGT-HEM)	EPA 1664A	GRAVIMETRIC SILICA GEL TREATED-HEM	0.43 mg/l	5 mg/l
pH	SM 4500H+B	ELECTROMETRIC	N.A.	N.A.
PHENOLICS, TOTAL RECOVERABLE	EPA 420.1	MANUAL DISTILL, COLORIMETRIC 4AAP	0.0006 mg/l	0.001 mg/l
SILICA, DISSOLVED	SM 4500-SiO ₂ C	COLORIMETRIC, MANUAL	0.10 mg/l	0.1 mg/l
SULFATE	ASTM 516-07	ION METHOD	1.9 mg/l	5 mg/l
SULFIDE	SM 4500-S ²⁻ F	TITRIMETRIC, IODINE	N.A.	0.1 mg/l
SURFACTANTS	SM 5540 C	COLORIMETRIC, METHYLENE BLUE	0.04 mg/l	0.10 mg/l
TDS	SM 2540 C	GRAVIMETRIC	N.A.	1 mg/l
TEMPERATURE	SM 2550 B	THERMOMETRIC	N.A.	N.A.
TOTAL ORGANIC CARBON	SM 5310 C	PERSULFATE UV OXIDATION	0.70 mg/l	1.00 mg/l
TOTAL PHOPSHORUS, ALL FORMS	SM 4500-P E	ASCORBIC ACID, MANUAL SINGLE REAGENT	0.008 mg/l	0.01 mg/l
TOTAL PHOPSHORUS,FLOW INJECTION	EPA 365.1.0	ACID PERSULFATE DIEGESTION METHOD, LACHAT	0.045 mg/l	0.10 mg/l
TSS	SM 2540 D	GRAVIMETRIC	N.A.	1 mg/l
TURBIDITY	SM 2130 B	NEPHELOMETRIC	N.A.	0.05 NTU

Modified 12/19/2018