Analyte	EPA METHOD[1]	MDL[23]	PQL[23]	Linear Working Range[23]
Aluminum	200.7	0.033	0.500	0.5 - 20
Arsenic	200.7	0.040	0.500	0.5 - 20
Barium	200.7	0.032	0.500	0.5 - 20
Boron	200.7	0.010	0.050	0.05 - 5
Cadmium	200.7	0.010	0.050	0.05 - 5
Calcium	200.7	0.022	0.500	0.5 - 20
Chromium	200.7	0.010	0.500	0.5 - 20
Copper	200.7	0.002	0.050	0.05 - 5
Iron	200.7	0.004	0.050	0.05 - 5
Lead	200.7	0.014	0.050	0.05 - 5
Magnesium	200.7	0.020	0.500	0.5 - 20
Manganese	200.7	0.002	0.050	0.05 - 5
Molybdenum	200.7	0.006	0.050	0.05 - 5
Nickel	200.7	0.005	0.050	0.05 - 5
Phosphorus	200.7	0.015	0.100	0.1 - 10
Potassium	200.7	0.030	0.500	0.5 - 20
Selenium	200.7	0.029	0.500	0.5 - 20
Silicon	200.7	0.020	0.500	0.5 - 20
Sodium	200.7	0.040	0.500	0.5 - 20
Sulfur	200.7	0.030	0.500	0.5 - 20
Zinc	200.7	0.031	0.050	0.05 - 5
NO3-N	353.2	0.148	0.500	0.5 - 10
NH4-N	350.1 (mod)	0.0625	0.500	0.5 - 10
TKN (low)	351.2	0.125	0.500	0.5 - 40
TKN (high)	351.2	0.125	5.000	5 - 150
OrthoP (high)	365.1	0.0025	0.100	0.1 - 5
OrthoP (low)	365.1	0.0025	0.010	0.01 - 1
Total P (high)	365.1	0.0025	0.100	0.1 - 5
Total P (low)	365.1	0.0025	0.010	0.01 - 1
Chloride	325.2	0.570	4.000	4 - 100
pH	150.1	N/A	0.1 SU	0.1 - 14
EC	120.1	N/A	10 µS/cm	10 - 12900

[1]All referenced U.S. EPA methods pertain to the analysis of liquids and do not address the preparation of solid samples.

[2]Unless specified all units are mg/l.

[3]The reported Method Detection Limit (MDL), Practical Quantitation Limit (PQL) and Linear Working Range apply to analytes in solution. For liquid extracts or digests derived from solid samples, these limits must be adjusted using appropriate conversion factors:

- **Example 1:** Mehlich-3 (M3) soil extraction: Conversion factor 10×

$$\frac{X\ mg\ of\ analyte}{\cancel{l\ of\ M3\ solution}} \times \frac{1\ \cancel{l\ of\ M3\ solution}}{1000\ \cancel{ml\ of\ M3\ solution}} \times \frac{^{10}\cancel{25\ ml\ of\ M3\ solution}}{^{1}\cancel{2.5\ g\ of\ soil}} \times \frac{1000\ \cancel{g\ of\ soil}}{1\ kg\ of\ soil} = \frac{10 \times X\ mg\ of\ analyte}{kg\ of\ soil}$$

- **Example 2:** Digestion of plant tissue (Dry Matter basis): Conversion factor 100×

$$\frac{Y\ mg\ of\ analyte}{\cancel{l\ of\ solution}} \times \frac{1\ \cancel{l\ of\ solution}}{1000\ \cancel{ml\ of\ solution}} \times \frac{^{100}\cancel{20\ ml\ of\ solution}}{^{1}\cancel{0.2\ g\ of\ DM}} \times \frac{1000\ \cancel{g\ of\ DM}}{1\ kg\ of\ DM} = \frac{100 \times Y\ mg\ of\ analyte}{kg\ of\ DM}$$

- **Example 3:** Conversion from percent to mg/kg: Conversion factor 10,000×

$$\frac{Z\%\ of\ analyte}{} = \frac{10{,}000 \times Z\ mg\ of\ analyte}{kg\ of\ DM}$$