



Code E6B - Anions (by Ion Chromatography)

Fluoride (F)	0.01 mg/L
Chloride (Cl)	0.03 mg/L
Bromide (Br)	0.03 mg/L
Nitrite (NO ₂)	0.01 mg/L
Nitrate (NO ₃)	0.01 mg/L
Phosphate (PO ₄)	0.02 mg/L
Sulphate (SO ₄)	0.03 mg/L

Note: Water samples for Code E6B should not be preserved at all.

Code E6C

pH	Cyanide (Total CN)
Total Suspended Solids (TSS)	Cyanide (Free CN)
Total Dissolved Solids (TDS)	Cyanide (Weak Acid Dissociable - WAD CN)
Color	Total Organic Carbon (TOC)
Conductivity	Biological Oxygen Demand (BOD)
Salinity	Chemical Oxygen Demand (COD)
Acidity	Dissolved Oxygen (DO)
Turbidity	Total Petroleum Hydrocarbon (TPH) - TPH-HO
NH ₃ + NH ₄	Total Petroleum Hydrocarbon (TPH) - gas/diesel
Reactive Silica	Total Phosphorous
Total Kjeldahl Nitrogen (TKN)	Hardness (must also do Code E6 ICP/OES)
Oil and Grease (Total)	Alkalinity (CaCO ₃)
Oil and Grease (Mineral)	(includes Carbonate CO ₃ & Bicarbonate HCO ₃)
Oil and Grease (Vegetable)	Microbiology (E. coli, Total Coliforms,
Ra-226	Fecal Coliforms, Heterotrophic Plate Count)
Radioactivity (gross alpha-beta)	

Code E6 Organics (Waters)

Phenols (4AAP)	SKALAR Autoanalyzer
Benzene Toluene Ethylbenzene Xylene (BTEX)	GC/MS
BTEX and TPH	GC/MS
Volatile Organic Compounds (VOC)	GC/MS
Polycyclic Aromatic Hydrocarbons (PAH)	GC/MS
Trihalomethanes (THM)	GC/MS
TPH	GC/MS
OC Pesticides	GC/MS
Phenolics	GC/MS
PCBs	GC/MS
PBB/PBDE	GC/MS
Geosmin & Methyl-Isoborneol	GC/MS

Metal Speciation in Water

Our research activities over the last few years have allowed us to link the capillary electrophoresis technique to conventional ICP/MS or High Resolution ICP/MS. Using as little as 5 µL of solution we can conveniently speciate a number of metals from their inorganic or organic metal species. This allows determination of a number of metal species sequentially. Actlabs can consult on the best ways to preserve samples for speciation analysis.

Pore Water Extraction (from sediment core)

- As speciation (As³⁺, As⁵⁺, MMA, DMA, Arsenobetaine)
- Sn speciation (Tripropylpentyl; Tributylpentyl; Dibutylpentyl; Monobutyl,tripentyl; Monophenyl,tripentyl; Diphenyl,tripentyl; Triphenyl,tripentyl)
- Fe speciation (Fe²⁺, Fe³⁺)
- Se speciation (Se⁶⁺, Se⁴⁺, Se-Methionine, Se-Cystine)
- Cr speciation (Cr³⁺, Cr⁶⁺)