

## List of Methods

The following methods have been established as acceptable for use by the laboratory. All are approved for use in-house or in the field; however, certification or accreditation may not be held for all analyses. If the required method does not appear on the list contact the Laboratory Director to discuss if the laboratory has the capability of performing the method.

### Petroleum Analysis Methodology Reference Table

| <u>Method</u> | <u>Description</u>           |
|---------------|------------------------------|
| ASTM D129     | % Sulfur                     |
| ASTM D1475    | Specific Gravity             |
| ASTM D445     | Viscosity @ 40 degrees C     |
| ASTM D4809-95 | BTU                          |
| ASTM D4007    | B S & W                      |
| ASTM D287     | Gravity A.P.I.               |
| ASTM D482     | Ash                          |
| ASTM D808     | Chlorides, Halides, Halogens |
| ASTM D93      | Flash, PM Closed Cup         |

### Environmental Analysis Methodology Reference Table

| <u>Method</u>        | <u>Description</u>                    |
|----------------------|---------------------------------------|
| ASTM D2216           | Moisture                              |
| ASTM D4007           | Bottom Sediment and Water             |
| EPA 180.1            | Turbidity                             |
| EPA 200.2            | Metals Digestion (Water)              |
| EPA 200.7-ICP        | Metals by ICP (Total or Dissolved)    |
| EPA 200.7-ICP        | Total Phosphorus                      |
| EPA 200.8-ICPMS      | Metals by ICP-MS (Total or Dissolved) |
| EPA 245.1-Cold Vapor | Mercury (Total or Dissolved)          |
| EPA 3010A            | Metals Digestion (Liquid/TCLP)        |
| EPA 3050B            | Metals Digestion (Solid)              |
| EPA 410.4            | COD                                   |
| EPA 420.1            | Phenolics                             |
| EPA 608              | Total Pesticides/PCBs                 |
| EPA 624              | Purgeables                            |
| EPA 625              | Base/Neutrals & Acids                 |
| EPA 600.4-81-045     | PCB in Transformer Oil                |
| EPA 1664A            | Oil and Grease                        |
| EPA 9071B, EPA 3540  | Oil and Grease, Soxhlet               |
| EPA 1600             | Enterococci                           |
| FDA 2400i            | Bottled Water Cap Testing             |
| FDA 2400i            | Bottled Water Container Testing       |
| FDA 2400i            | Coliform Count/VRB                    |
| HACH 10029           | E. Coli (M-Coli Blue)                 |
| HACH 10242           | TKN (TN, NNN)                         |
| HACH 8167            | Chlorine, Total Residual              |
| HACH 8193            | Tannin and Lignin                     |
| NAS 1638             | Particle Count                        |
| LACHAT 10-107-06-1-I | Ammonia-N                             |

## List of Methods

|                          |  |
|--------------------------|--|
| LACHAT 10-107-06-2-I     | Nitrogen, Total Kjeldahl   |
| LACHAT 10-210-00-1-X     | Phenolics  |
| SW 846- 1010             | Flash Point, Ignitibility  |
| SW 846- 1311             | TCLP Leachate  |
| SW 846- 1311/6010C/7470A | TCLP Metals  |
| SW 846- 1311/6020A/7470A | TCLP Metals  |
| SW 846- 1311/8081        | TCLP Pesticides  |
| SW 846- 1311/8260D       | TCLP Volatiles   |
| SW 846- 1311/8270D       | TCLP Semi-Volatiles  |
| SW846-1312               | SPLP Leachate  |
| SW 846- 1312/6010C/7470A | SPLP Metals  |
| SW 846- 1312/6020A/7470A | SPLP Metals  |
| SW 846- 1312/8081        | SPLP Pesticides  |
| SW 846- 1312/8260D       | SPLP Volatiles   |
| SW 846- 1312/8270D       | SPLP Semi-Volatiles  |
| SW 846- 3510             | Separatory Funnel Liquid-Liquid Ext.                               |
| SW 846- 8081             | Total Pesticides   |
| SW 846- 3520             | Continuous Liquid-Liquid Ext.                                      |
| SW 846- 8270D            | Total Semi-Volatiles   |
| SW 846- 3550             | Sonication Extraction  |
| SW 846- 3620             | Florisil Column Clean up   |
| SW 846- 3650             | Acid-Base Partition Clean up                                       |
| SW 846- 5030/5035        | Purge & Trap   |
| SW 846- 6010C-ICP        | Metals by ICP  |
| SW 846- 6010C-ICP        | Total Phosphorus   |
| SW 846- 6020A-ICPMS      | Metals by ICP-MS   |
| SW 846- 7470A            | Mercury – Cold Vapor   |
| SW 846- 7471B            | Mercury – Cold Vapor   |
| SW 846- 8015C            | DRO, ORO   |
| SW 846- 8082             | PCBs   |
| SW 846- 8260D            | GC/MS-Total Volatiles  |
| SW 846- 9013             | Reactive Cyanide   |
| SW 846- 9030A Sec. 7     | Acid Sprung/Reactive Sulfide (Solid/Water)                         |
| SW 846- 9030B            | Reactive/Total Sulfide   |
| SW 846- 9040C            | pH (Liquid)  |
| SW 846- 9045D            | pH (Soil/Solid)  |
| SW 846- 9081             | Cation Exchange Capacity   |
| SW 846- 9095             | Paint Filter Test  |
| Std Method 2120-C        | Color  |
| Std Method 2150-B        | Odor   |
| Std Method 2310-B        | Acidity  |
| Std Method 2320-B        | Alkalinity (as M, P, CaCO <sub>3</sub> , Carbonate or Bicarbonate) |
| Std Method 2340-B        | Hardness, Calcium + Magnesium                                      |
| Std Method 2340-C        | Hardness, Total as CaCO <sub>3</sub>                               |
| Std Method 2510-B        | Conductivity   |

## List of Methods

|  |  |
|--|--|
| Std Method 2520-B                                | Salinity   |
| Std Method 2540-B                                | Total Solids (Water)   |
| Std Method 2540-C                                | Total Dissolved Solids   |
| Std Method 2540-D                                | Total Suspended Solids, Mixed Liquor Suspended Solids  |
| Std Method 2540-E                                | Volatile Solids (Water)  |
| Std Method 2540-F                                | Settleable Solids  |
| Std Method 2540-G                                | Total Solids, Volatile Solids, Ash (Semi Solids and Solids)                                    |
| Std Method 2550-B                                | Temperature  |
| Std Method 2710 F                                | Specific Gravity   |
| Std Method 3500-CR-B                             | Hexa-Chromium  |
| Std Method 4110B (IC)                            | Cl <sub>2</sub> , SO <sub>4</sub> , Br, NO <sub>3</sub> , NO <sub>2</sub> (Total or Dissolved) |
| Std Method 4500-Cl-B                             | Chloride (Water)   |
| Std Method 4500-Cl-G                             | Total Residual Chlorine (Colorimetric)   |
| Std Method 4500-CO <sub>2</sub> C                | Carbon Dioxide (Total)   |
| Std Method 4500-CN-E                             | Cyanide, Total   |
| Std Method 4500-CN-G                             | Cyanide, Amenable or Chlorinated   |
| Std Method 4500-CN-I                             | Cyanide, Weak Acid (Free)  |
| Std Method 4500-F C, D                           | Fluoride   |
| Std Method 4500-H+B                              | pH   |
| Std Method 4500-NO <sub>2</sub> B                | Nitrite, Colorimetric  |
| Std Method 4500 NH <sub>3</sub> -D               | Ammonia - N  |
| Std Method 4500 Norg-B                           | Nitrogen, Total Kjeldahl   |
| Std Method 4500 Norg                             | Nitrogen, Organic  |
| Std Method 4500-O-G                              | Oxygen, Dissolved  |
| Std Method 4500-P-E                              | Orthophosphate   |
| Std Method 4500-P-E                              | Total Phosphorus   |
| Std Method 4500-S <sub>2</sub> -D                | Sulfide  |
| Std Method 4500-SiO <sub>2</sub> -D              | Silica (Total or Dissolved)  |
| Std Method 4500-SO <sub>3</sub> <sup>2-</sup> -B | Sulfite  |
| Std Method 4500-Cl-G                             | Total Residual Chlorine (Colorimetric)   |
| Std Method 5210B                                 | BOD/CBOD   |
| Std Method 5310C                                 | TOC/DOC  |
| Std Method 5540C                                 | Surfactants as MBAS  |
| Std Method 9215B                                 | Heterotrophic Plate Count  |
| Std Method 9221E                                 | Coliform, Fecal – Mult/tube  |
| Std Method 9222D                                 | Coliform, Fecal – Membrane   |
| Std Method 9223B                                 | Coliform (Colilert Method)   |

### Industrial Hygiene Analysis Methodology Reference Table

#### Method

XRF

NIOSH 0600

NIOSH 7082

NIOSH 7303

NIOSH 7400

**NOTE: Mold and Asbestos inspections also available.**

#### Description

Lead by XRF

Respirable Dust in air

Lead in air

Metals in air

PCM (Asbestos fiber counting)