

ATTACHMENT I

WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER AND WASTE MANAGEMENT

List of Certified Parameters
for

MARYLAND SPECTRAL SERVICES, INC.
HALETHORPE, MARYLAND

PARAMETERS CERTIFIED

NONPOTABLE WATER INORGANIC NONMETALS

<u>ANALYTE</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Ammonia	EPA350.1 Rev 2.0-1993	Spectrophotometric
Bromide	EPA300.0 Rev 2.1-1993	IC
Chloride	EPA300.0 Rev 2.1-1993	IC
Chromium VI, Dissolved	EPA218.6 Rev 3.3-1994	IC
Chromium VI, Dissolved	SW7199	IC
Conductance, Specific	SM2510 B-11	Probe
Fluoride	EPA300.0 Rev 2.1-1993	IC
Hardness, Total	SM2340 B-11	Calculation
Nitrate	EPA300.0 Rev 2.1-1993	IC
Nitrate-Nitrite	EPA300.0 Rev 2.1-1993	Calculation
Nitrite	EPA300.0 Rev 2.1-1993	IC
Nitrogen, Total Kjeldahl (TKN)	HACH 10242	Calculation
Oil & Grease	EPA1664 B	Gravimetric
Oxygen Demand, Chemical (COD)	EPA410.4 Rev 2.0-1993	Spectrophotometric
pH (Hydrogen Ion)	SW9040C	Electrode
Phosphorus, Ortho	EPA365.3 Rev 1978	Spectrophotometric
Phosphorus, Total	EPA365.3 Rev 1978	Spectrophotometric
Solids, Dissolved	SM2540 C-15	Gravimetric
Solids, Suspended	USGS I-3765-85	Gravimetric
Sulfate	EPA300.0 Rev 2.1-1993	IC
Turbidity	EPA180.1 Rev 2.0-1993	Turbidimetric

NONPOTABLE WATER TRACE METALS

<u>METAL</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Aluminum	EPA200.8 Rev 5.4-1994	ICP-MS
Aluminum	SW6020B	ICP-MS
Antimony	EPA200.8 Rev 5.4-1994	ICP-MS
Antimony	SW6020B	ICP-MS
Arsenic	EPA200.8 Rev 5.4-1994	ICP-MS
Arsenic	SW6020B	ICP-MS
Barium	EPA200.8 Rev 5.4-1994	ICP-MS
Barium	SW6020B	ICP-MS
Beryllium	EPA200.8 Rev 5.4-1994	ICP-MS
Beryllium	SW6020B	ICP-MS
Cadmium	EPA200.8 Rev 5.4-1994	ICP-MS
Cadmium	SW6020B	ICP-MS
Calcium	EPA200.8 Rev 5.4-1994	ICP-MS
Calcium	SW6020B	ICP-MS
Chromium	EPA200.8 Rev 5.4-1994	ICP-MS
Chromium	SW6020B	ICP-MS
Cobalt	EPA200.8 Rev 5.4-1994	ICP-MS
Cobalt	SW6020B	ICP-MS
Copper	EPA200.8 Rev 5.4-1994	ICP-MS
Copper	SW6020B	ICP-MS
Iron	EPA200.8 Rev 5.4-1994	ICP-MS
Iron	SW6020B	ICP-MS
Lead	EPA200.8 Rev 5.4-1994	ICP-MS
Lead	SW6020B	ICP-MS
Magnesium	EPA200.8 Rev 5.4-1994	ICP-MS
Magnesium	SW6020B	ICP-MS
Manganese	EPA200.8 Rev 5.4-1994	ICP-MS
Manganese	SW6020B	ICP-MS
Mercury	SW6020B	ICP-MS
Metals	SW3010A	Digestion
Molybdenum	EPA200.8 Rev 5.4-1994	ICP-MS
Molybdenum	SW6020B	ICP-MS
Nickel	EPA200.8 Rev 5.4-1994	ICP-MS
Nickel	SW6020B	ICP-MS
Potassium	EPA200.8 Rev 5.4-1994	ICP-MS
Potassium	SW6020B	ICP-MS
Selenium	EPA200.8 Rev 5.4-1994	ICP-MS
Selenium	SW6020B	ICP-MS
Silver	EPA200.8 Rev 5.4-1994	ICP-MS
Silver	SW6020B	ICP-MS
Sodium	EPA200.8 Rev 5.4-1994	ICP-MS
Sodium	SW6020B	ICP-MS
Thallium	EPA200.8 Rev 5.4-1994	ICP-MS
Thallium	SW6020B	ICP-MS
Tin	EPA200.8 Rev 5.4-1994	ICP-MS
Tin	SW6020B	ICP-MS
Vanadium	EPA200.8 Rev 5.4-1994	ICP-MS
Vanadium	SW6020B	ICP-MS
Zinc	EPA200.8 Rev 5.4-1994	ICP-MS
Zinc	SW6020B	ICP-MS

NONPOTABLE WATER VOLATILE ORGANIC CHEMICALS

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Halogenated & Aromatic Volatiles	SW8021B	GC
Purge & Trap For Aqueous Samples	SW5030B	Extraction
Purgeables	EPA624.1	GC/MS
Total Petroleum Hydrocarbons (GRO)	SW8015C	GC/FID
Volatile Organic Compounds	SW8260D	GC/MS

NONPOTABLE WATER EXTRACTABLE AND SEMI-VOLATILE ORGANIC CHEMICALS

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Base/Neutrals & Acids	EPA625.1	GC/MS
Chlorinated Herbicides	SW8151A	GC/ECD
Continuous Liquid-Liquid	SW3520C	Extraction
EDB & DBCP	SW8011	GC/ECD
Florisol Cleanup	SW3620C	Cleanup
Organochlorine Pesticides	SW8081B	GC
Polychlorinated Biphenyls	SW8082A	GC
Semivolatiles Organic Compounds	SW8270E	GC/MS
Separatory Funnel Liquid-Liquid	SW3510C	Extraction
Sulfuric Acid/Permanganate Cleanup	SW3665A	Cleanup
Total Petroleum Hydrocarbons (DRO)	SW8015C	GC/FID
Total Petroleum Hydrocarbons (ORO)	SW8015C	GC/FID

HAZARDOUS WASTE CHARACTERISTICS

<u>PROCEDURE</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Corrosivity	SW9040C	Electrode
Corrosivity	SW9045D	Electrode
Ignitability (Solids)	SW1030	
Paint Filter Test	SW9095B	Gravimetric
TCLP- Metals	SW1311	Extraction
TCLP- Organics	SW1311	Extraction

SOLID AND CHEMICAL INORGANIC NONMETALS

<u>ANALYTE</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Bromide	EPA300.0 Rev 2.1-1993	IC
Chloride	EPA300.0 Rev 2.1-1993	IC
Chromium VI, Dissolved	SW7196A	Spectrophotometric
Fluoride	EPA300.0 Rev 2.1-1993	IC
Halides, Extractable Organic (EOX)	SW9023	Titrimetric
Nitrate	EPA300.0 Rev 2.1-1993	IC
Nitrite	EPA300.0 Rev 2.1-1993	IC
Oil & Grease	SW9071B	Gravimetric
pH (Hydrogen Ion)	SW9045D	Electrode
Sulfate	EPA300.0 Rev 2.1-1993	IC

SOLID AND CHEMICAL TRACE METALS

<u>METAL</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Aluminum	SW6020B	ICP-MS
Antimony	SW6020B	ICP-MS
Arsenic	SW6020B	ICP-MS
Barium	SW6020B	ICP-MS
Beryllium	SW6020B	ICP-MS
Cadmium	SW6020B	ICP-MS
Calcium	SW6020B	ICP-MS
Chromium	SW6020B	ICP-MS
Cobalt	SW6020B	ICP-MS
Copper	SW6020B	ICP-MS
Iron	SW6020B	ICP-MS
Lead	SW6020B	ICP-MS
Magnesium	SW6020B	ICP-MS
Manganese	SW6020B	ICP-MS
Mercury	SW6020B	ICP-MS
Metals	SW3010A	Digestion
Metals	SW3050B	Digestion
Molybdenum	SW6020B	ICP-MS
Nickel	SW6020B	ICP-MS
Potassium	SW6020B	ICP-MS
Selenium	SW6020B	ICP-MS
Silver	SW6020B	ICP-MS
Sodium	SW6020B	ICP-MS
Thallium	SW6020B	ICP-MS
Tin	SW6020B	ICP-MS
Vanadium	SW6020B	ICP-MS
Zinc	SW6020B	ICP-MS

SOLID AND CHEMICAL VOLATILE ORGANIC CHEMICALS

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Closed System Purge & Trap	SW5035	Extraction
Halogenated & Aromatic Volatiles	SW8021B	GC
Total Petroleum Hydrocarbons (GRO)	SW8015C	GC/FID
Volatile Organic Compounds	SW8260D	GC/MS

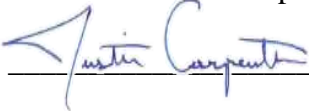
SOLID AND CHEMICAL EXTRACTABLE AND SEMI-VOLATILE ORGANIC CHEMICALS

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Chlorinated Herbicides	SW8151A	GC/ECD
Florisil Cleanup	SW3620C	Cleanup
Microwave Extraction	SW3546	Extraction
Organochlorine Pesticides	SW8081B	GC
Polychlorinated Biphenyls	SW8082A	GC
Semivolatile Organic Compounds	SW8270E	GC/MS
Soxhlet	SW3540C	Extraction
Sulfuric Acid/Permanganate Cleanup	SW3665A	Cleanup

This laboratory may test **ONLY** for those environmental parameters listed above for compliance reporting purposes. All testing must be by the test method cited in the current application for certification.

This Certification Expires September 30, 2024.

Certificate No 416

 Issued on November 03, 2023

Justin Carpenter
Program Manager

This certified parameter list supersedes all previously issued parameter lists for this certificate number.