

# West Virginia

## Department of Environmental Protection

hereby certifies

### Phase Separation Science, Inc.

to perform analyses for the purpose of determining compliance with the requirements of the state's natural resources and environmental programs when required by an order issued by the agency or required by statute.

This certificate does not guarantee the validity of data generated, but indicates the methodology, equipment, quality control procedures, records, and proficiency of the laboratory have been examined and found to be acceptable.

This certificate is the property of the Department of Environmental Protection

303

Certificate number



Quality Assurance Officer



February 21, 2006

Date Issued

Certification originally granted 7/15/1999



Director

ATTACHMENT I

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

List of Certified Parameters  
for

**PHASE SEPARATION SCIENCE, INC.**  
**BALTIMORE, MARYLAND**

PARAMETERS CERTIFIED

NONPOTABLE WATER INORGANIC NONMETALS

<u>ANALYTE</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Alkalinity	EPA310.2 Rev 2.2-1974	Colorimetric
Alkalinity	SM2320 B-11	Titrimetric
Chlorine, Residual	HACH 8167	Spectrophotometric
Conductance, Specific	SM2510 B-11	Probe
Cyanide, Total	SM4500-CN E-11	Spectrophotometric
Hardness, Total	SM2340 B-11	Calculation
Nitrate	EPA300.1 Rev 1.0-1997	IC
Nitrite	EPA300.0 Rev 2.1-1993	IC
Oil & Grease	EPA1664 A	Gravimetric
pH (Hydrogen Ion)	SM4500-H B-11	Electrode
Solids, Dissolved	SM2540 C-11	Gravimetric
Solids, Suspended	SM2540 D-11	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	SW6020A	ICP-MS
Antimony	EPA200.8 Rev 5.4-1994	ICP-MS
Antimony	SW6020A	ICP-MS
Arsenic	EPA200.8 Rev 5.4-1994	ICP-MS
Arsenic	SW6020A	ICP-MS
Barium	EPA200.8 Rev 5.4-1994	ICP-MS
Barium	SW6020A	ICP-MS
Beryllium	EPA200.8 Rev 5.4-1994	ICP-MS
Beryllium	SW6020A	ICP-MS
Cadmium	EPA200.8 Rev 5.4-1994	ICP-MS
Cadmium	SW6020A	ICP-MS
Calcium	EPA200.8 Rev 5.4-1994	ICP-MS
Calcium	SW6020A	ICP-MS

Chromium	EPA200.8 Rev 5.4-1994	ICP-MS
Chromium	SW6020A	ICP-MS
Cobalt	EPA200.8 Rev 5.4-1994	ICP-MS
Cobalt	SW6020A	ICP-MS
Copper	EPA200.8 Rev 5.4-1994	ICP-MS
Copper	SW6020A	ICP-MS
Iron	EPA200.8 Rev 5.4-1994	ICP-MS
Iron	SW6020A	ICP-MS
Lead	EPA200.8 Rev 5.4-1994	ICP-MS
Lead	SW6020A	ICP-MS
Magnesium	EPA200.8 Rev 5.4-1994	ICP-MS
Magnesium	SW6020A	ICP-MS
Manganese	EPA200.8 Rev 5.4-1994	ICP-MS
Manganese	SW6020A	ICP-MS
Mercury	SW6020A	ICP-MS
Metals	SW3010A	Digestion
Nickel	EPA200.8 Rev 5.4-1994	ICP-MS
Nickel	SW6020A	ICP-MS
Potassium	EPA200.8 Rev 5.4-1994	ICP-MS
Potassium	SW6020A	ICP-MS
Selenium	EPA200.8 Rev 5.4-1994	ICP-MS
Selenium	SW6020A	ICP-MS
Silver	EPA200.8 Rev 5.4-1994	ICP-MS
Silver	SW6020A	ICP-MS
Sodium	EPA200.8 Rev 5.4-1994	ICP-MS
Sodium	SW6020A	ICP-MS
Thallium	EPA200.8 Rev 5.4-1994	ICP-MS
Thallium	SW6020A	ICP-MS
Vanadium	EPA200.8 Rev 5.4-1994	ICP-MS
Vanadium	SW6020A	ICP-MS
Zinc	EPA200.8 Rev 5.4-1994	ICP-MS
Zinc	SW6020A	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
Total Petroleum Hydrocarbons (GRO)	SW8015C	GC/FID
Volatile Organic Compounds	SW8260B	GC/MS

NONPOTABLE WATER EXTRACTABLE AND SEMI-VOLATILE ORGANIC CHEMICALS

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Chlorinated Herbicides	SW8151A	GC
Organochlorine Pesticides	SW8081B	GC
Polychlorinated Biphenyls	SW8082A	GC
Semivolatile Organic Compounds	SW8270C	GC/MS
Separatory Funnel Liquid-Liquid	SW3510C	Extraction
Total Petroleum Hydrocarbons (DRO)	SW8015C	GC/FID

HAZARDOUS WASTE CHARACTERISTICS

<u>PROCEDURE</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
TCLP- Metals & Organics	SW1311	Extraction

SOLID AND CHEMICAL TRACE METALS

<u>METAL</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Aluminum	SW6020A	ICP-MS
Antimony	SW6020A	ICP-MS
Arsenic	SW6020A	ICP-MS
Barium	SW6020A	ICP-MS
Beryllium	SW6020A	ICP-MS
Cadmium	SW6020A	ICP-MS
Calcium	SW6020A	ICP-MS
Chromium	SW6020A	ICP-MS
Cobalt	SW6020A	ICP-MS
Copper	SW6020A	ICP-MS
Iron	SW6020A	ICP-MS
Lead	SW6020A	ICP-MS
Magnesium	SW6020A	ICP-MS
Manganese	SW6020A	ICP-MS
Mercury	SW6020A	ICP-MS
Metals, Total	SW3050B	Digestion
Nickel	SW6020A	ICP-MS
Potassium	SW6020A	ICP-MS
Selenium	SW6020A	ICP-MS
Silver	SW6020A	ICP-MS
Sodium	SW6020A	ICP-MS
Thallium	SW6020A	ICP-MS
Vanadium	SW6020A	ICP-MS
Zinc	SW6020A	ICP-MS

SOLID AND CHEMICAL VOLATILE ORGANIC CHEMICALS

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Closed System Purge & Trap	SW5035A	Extraction
Halogenated & Aromatic Volatiles	SW8021B	GC
Total Petroleum Hydrocarbons (GRO)	SW8015C	GC/FID
Volatile Organic Compounds	SW8260B	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
Organochlorine Pesticides	SW8081B	GC
Polychlorinated Biphenyls	SW8082A	GC
Semivolatile Organic Compounds	SW8270C	GC/MS
Total Petroleum Hydrocarbons (DRO)	SW8015C	GC/FID
Ultrasonic	SW3550C	Extraction

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 August 31, 2019.

Certificate No 303

 Issued on August 31, 2018

Linda Keller  
Program Manager

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