

Attachment I

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

List of Certified Parameters
for

RELIANCE LABORATORIES - BRIDGEPORT
BRIDGEPORT, WEST VIRGINIA

PARAMETERS CERTIFIED

NONPOTABLE WATER INORGANIC NONMETALS

<u>ANALYTE</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Acidity	SM2310 B-97	Titrimetric
Alkalinity	SM2320 B-97	Titrimetric
Ammonia	ASTM D6919-03	IC
Ammonia	SM4500-NH3 B-97	Distillation
Ammonia	SM4500-NH3 C-97	Titrimetric
Bromide	EPA300.0 Rev 2.1-1993	IC
Carbon, Total Organic (TOC)	SM5310 C-00	Oxidation
Chloride	EPA300.0 Rev 2.1-1993	IC
Chloride	SM4500-Cl B-97	Titrimetric
Chlorine, Residual	HACH 8167	Spectrophotometric
Color	SM2120 B-01	Visual Comparison
Conductance, Specific	EPA120.1 Rev 1982	Probe
Cyanide	SM4500-CN C-99	Distillation
Cyanide, Available	SM4500-CN G-99	Distillation
Cyanide, Total	SM4500-CN E-99	Spectrophotometric
Cyanide, Weak Acid Dissociable	SM4500-CN I-99	Distillation
Fluoride	EPA300.0 Rev 2.1-1993	IC
Hardness, Calcium	SM2340 B-97	Calculation
Hardness, Total	SM2340 B-97	Calculation
Hardness, Total	SM2340 C-97	Titrimetric
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)	SM4500-NH3 B-97	Distillation
Nitrogen, Total Kjeldahl (TKN)	SM4500-NH3 C-97	Titrimetric
Nitrogen, Total Kjeldahl (TKN)	SM4500-Norg B-97	Digestion
Oil & Grease	EPA1664 A	Gravimetric
Oxygen Demand, Biochemical (BOD)	SM5210 B-01	Probe
Oxygen Demand, Chemical (COD)	EPA410.4 Rev 2.0-1993	Spectrophotometric
Oxygen, Dissolved	HACH 10360	LDO Probe
Oxygen, Dissolved	SM4500-O G-01	Probe
pH (Hydrogen Ion)	SM4500-H B-00	Electrode

<u>ANALYTE</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Phenolics, Total	EPA420.1 Rev 1978	Spectrophotometric
Phosphorus, Ortho	EPA300.0 Rev 2.1-1993	IC
Phosphorus, Total	HACH 10210	Spectrophotometric
Phosphorus, Total	SM4500-P B(5)-99	Digestion
Phosphorus, Total	SM4500-P E-99	Spectrophotometric
Solids, Dissolved	SM2540 C-97	Gravimetric
Solids, Settleable	SM2540 F-97	Imhoff
Solids, Suspended	SM2540 D-97	Gravimetric
Solids, Total	SM2540 B-97	Gravimetric
Solids, Volatile	EPA160.4	Gravimetric
Sulfate	ASTM D516-02	Turbidimetric
Sulfate	EPA300.0 Rev 2.1-1993	IC
Sulfide	SM4500-S F-00	Titrimetric
Sulfite	SM4500-SO3 B-00	Titrimetric
Surfactants (MBAS)	SM5540 C-00	Spectrophotometric
Temperature	SM2550 B-00	Thermometric
Turbidity	SM2130 B-01	Turbidimetric

NONPOTABLE WATER TRACE METALS

<u>METAL</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Aluminum	EPA200.7 Rev 4.4-1994	ICP
Aluminum	EPA200.8 Rev 5.4-1994	ICP-MS
Antimony	EPA200.7 Rev 4.4-1994	ICP
Antimony	EPA200.8 Rev 5.4-1994	ICP-MS
Arsenic	EPA200.7 Rev 4.4-1994	ICP
Arsenic	EPA200.8 Rev 5.4-1994	ICP-MS
Barium	EPA200.7 Rev 4.4-1994	ICP
Barium	EPA200.8 Rev 5.4-1994	ICP-MS
Beryllium	EPA200.7 Rev 4.4-1994	ICP
Beryllium	EPA200.8 Rev 5.4-1994	ICP-MS
Boron	EPA200.7 Rev 4.4-1994	ICP
Boron	EPA200.8 Rev 5.4-1994	ICP-MS
Cadmium	EPA200.7 Rev 4.4-1994	ICP
Cadmium	EPA200.8 Rev 5.4-1994	ICP-MS
Calcium	EPA200.7 Rev 4.4-1994	ICP
Calcium	EPA200.8 Rev 5.4-1994	ICP-MS
Chromium	EPA200.7 Rev 4.4-1994	ICP
Chromium	EPA200.8 Rev 5.4-1994	ICP-MS
Chromium, Hexavalent	SM3500-Cr B-09	Spectrophotometric
Cobalt	EPA200.7 Rev 4.4-1994	ICP
Cobalt	EPA200.8 Rev 5.4-1994	ICP-MS
Copper	EPA200.7 Rev 4.4-1994	ICP
Copper	EPA200.8 Rev 5.4-1994	ICP-MS
Iron	EPA200.7 Rev 4.4-1994	ICP
Iron	EPA200.8 Rev 5.4-1994	ICP-MS
Lead	EPA200.7 Rev 4.4-1994	ICP
Lead	EPA200.8 Rev 5.4-1994	ICP-MS
Magnesium	EPA200.7 Rev 4.4-1994	ICP

<u>METAL</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Magnesium	EPA200.8 Rev 5.4-1994	ICP-MS
Manganese	EPA200.7 Rev 4.4-1994	ICP
Manganese	EPA200.8 Rev 5.4-1994	ICP-MS
Mercury	EPA1631 E	CVAF
Mercury	EPA200.8 Rev 5.4-1994	ICP-MS
Mercury	EPA245.1 Rev 3.0-1994	CVAA
Molybdenum	EPA200.7 Rev 4.4-1994	ICP
Nickel	EPA200.7 Rev 4.4-1994	ICP
Nickel	EPA200.8 Rev 5.4-1994	ICP-MS
Potassium	EPA200.7 Rev 4.4-1994	ICP
Potassium	EPA200.8 Rev 5.4-1994	ICP-MS
Selenium	EPA200.7 Rev 4.4-1994	ICP
Selenium	EPA200.8 Rev 5.4-1994	ICP-MS
Silicon	EPA200.7 Rev 4.4-1994	ICP
Silver	EPA200.7 Rev 4.4-1994	ICP
Silver	EPA200.8 Rev 5.4-1994	ICP-MS
Sodium	EPA200.7 Rev 4.4-1994	ICP
Sodium	EPA200.8 Rev 5.4-1994	ICP-MS
Strontium	EPA200.7 Rev 4.4-1994	ICP
Strontium	EPA200.8 Rev 5.4-1994	ICP-MS
Thallium	EPA200.7 Rev 4.4-1994	ICP
Thallium	EPA200.8 Rev 5.4-1994	ICP-MS
Tin	EPA200.7 Rev 4.4-1994	ICP
Tin	EPA200.8 Rev 5.4-1994	ICP-MS
Vanadium	EPA200.7 Rev 4.4-1994	ICP
Vanadium	EPA200.8 Rev 5.4-1994	ICP-MS
Zinc	EPA200.7 Rev 4.4-1994	ICP
Zinc	EPA200.8 Rev 5.4-1994	ICP-MS

NONPOTABLE WATER MICROBIOLOGY

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Coliform, Fecal (MF)	SM9222 D-97	Membrane Filter
Heterotrophic Plate Count (HPC)	SM9215 B-00	Pour Plate

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	GC/MS
Total Petroleum Hydrocarbons (GRO)	SW8015B	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>
Separatory Funnel Liquid-Liquid	SW3510C	Extraction
Solid Phase Extraction	SW3535A	Extraction
Total Petroleum Hydrocarbons (DRO)	SW8015B	GC/FID

HAZARDOUS WASTE CHARACTERISTICS

<u>PROCEDURE</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Corrosivity	SW9040C	Electrode
Ignitability	SW1010A	Closed Cup
Paint Filter Test	SW9095B	Gravimetric
TCLP- Metals & Organics	SW1311	Extraction

SOLID AND CHEMICAL INORGANIC NONMETALS

<u>ANALYTE</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Ammonia	SM4500-NH3 B-97	Distillation
Ammonia	SM4500-NH3 C-97	Titrimetric
Cyanide, Total	SW9010B	Distillation
Cyanide, Total	SW9013	Extraction
Cyanide, Total	SW9014	Titrimetric
Nitrogen, Total Kjeldahl (TKN)	SM4500-NH3 B-97	Distillation
Nitrogen, Total Kjeldahl (TKN)	SM4500-NH3 C-97	Titrimetric
Nitrogen, Total Kjeldahl (TKN)	SM4500-Norg B-97	Digestion
pH (Hydrogen Ion)	SW9045D	Electrode
Phosphorus, Total	SM4500-P B(5)-99	Digestion
Phosphorus, Total	SM4500-P E-99	Spectrophotometric
Solids, Total, Fixed, & Volatile	SM2540 G-97	Gravimetric

SOLID AND CHEMICAL TRACE METALS

<u>METAL</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Aluminum	SW6010C	ICP
Antimony	SW6010C	ICP
Arsenic	SW6010C	ICP
Barium	SW6010C	ICP
Beryllium	SW6010C	ICP
Boron	SW6010C	ICP
Cadmium	SW6010C	ICP
Calcium	SW6010C	ICP
Chromium	SW6010C	ICP
Cobalt	SW6010C	ICP
Copper	SW6010C	ICP
Iron	SW6010C	ICP
Lead	SW6010C	ICP
Magnesium	SW6010C	ICP
Manganese	SW6010C	ICP

<u>METAL</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Mercury	SW7471A	CVAA
Metals	SW3050B	Digestion
Molybdenum	SW6010C	ICP
Nickel	SW6010C	ICP
Potassium	SW6010C	ICP
Selenium	SW6010C	ICP
Silver	SW6010C	ICP
Sodium	SW6010C	ICP
Thallium	SW6010C	ICP
Vanadium	SW6010C	ICP
Zinc	SW6010C	ICP

SOLID AND CHEMICAL MICROBIOLOGY

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Coliform, Fecal (MF)	SM9222 D-97	Membrane Filter

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)	SW8015B	GC/FID

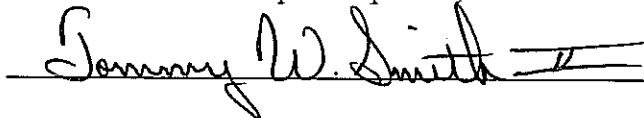
SOLID AND CHEMICAL EXTRACTABLE AND SEMI-VOLATILE ORGANIC CHEMICALS

<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Total Petroleum Hydrocarbons (DRO)	SW8015B	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 April 30, 2015.

Certificate No 158



Issued on August 15, 2014

Tommy W. Smith II
Quality Assurance Officer

This Attachment I supersedes & voids all previous Attachment I documents issued by WV DEP.