

Attachment I

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

List of Certified Parameters
for

APPALACHIAN STATES ANALYTICAL, LLC
SHELBIANA, KENTUCKY

PARAMETERS CERTIFIED

NONPOTABLE WATER INORGANIC NONMETALS

<u>ANALYTE</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Acidity	SM2310 B-97	Titrimetric
Alkalinity	EPA310.2 Rev 2.2-1974	Colorimetric
Alkalinity	SM2320 B-97	Titrimetric
Ammonia	SM4500-NH3 D-97	ISE
Carbon, Total Organic (TOC)	SM5310 C-00	Oxidation
Chloride	EPA300.0 Rev 2.1-1993	IC
Chlorine, Residual	SM4500-Cl G-00	Spectrophotometric
Chromium, Hexavalent	SM3500-Cr B-09	Spectrophotometric
Conductance, Specific	SM2510 B-97	Probe
Cyanide, Amenable to Chlorination	SM4500-CN E-11	Spectrophotometric
Cyanide, Amenable to Chlorination	SM4500-CN G-99	Distillation
Cyanide, Total	SM4500-CN C-99	Distillation
Cyanide, Total	SM4500-CN E-99	Spectrophotometric
Cyanide, Weak Acid Dissociable	SM4500-CN E-11	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
Nitrate	EPA300.0 Rev 2.1-1993	IC
Nitrate-Nitrite	HACH 10206	Spectrophotometric
Nitrite	SM4500-NO2 B-00	Spectrophotometric
Nitrogen, Total	HACH 10242	Calculation
Nitrogen, Total Kjeldahl (TKN)	HACH 10242	Spectrophotometric
Oil & Grease	EPA1664 A	Gravimetric
Oxygen Demand, Biochemical (BOD)	SM5210 B-01	Probe
Oxygen Demand, Carbonaceous Biochemical (CBOD)	SM5210 B-01	Probe
Oxygen Demand, Chemical (COD)	HACH 8000	Spectrophotometric
Oxygen, Dissolved	HACH 10360	LDO Probe
Oxygen, Dissolved	SM4500-O G-01	Probe
pH (Hydrogen Ion)	SM4500-H B-00	Electrode
Phenolics, Total	EPA420.1 Rev 1978	Spectrophotometric
Phosphorus, Ortho	SM4500-P E-99	Spectrophotometric

<u>METAL</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
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
Selenium	SM3113 B-04	GFAA
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
Thallium	EPA200.7 Rev 4.4-1994	ICP
Thallium	EPA200.8 Rev 5.4-1994	ICP-MS
Thallium	EPA200.9 Rev 2.2-1994	STGFAA
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
Coliform, Fecal (MPN)	Colilert 18	Multiple Well
Coliform, Fecal (MPN)	SM9223 B-04	Multiple Tube

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<u>GROUP</u>	<u>METHOD</u>	<u>TECHNOLOGY</u>
Acute - Ceriodaphnia dubia	EPA821-R-02-012 2002.0	Acute
Acute - Fathead Minnow	EPA821-R-02-012 2000.0	Acute
Chronic - Ceriodaphnia dubia	EPA821-R-02-013 1002.0	Chronic
Chronic - Fathead Minnow	EPA821-R-02-013 1000.0	Chronic

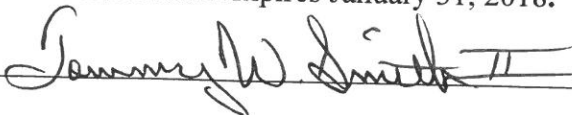
SOLID AND CHEMICAL MICROBIOLOGY

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

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 January 31, 2018.

Certificate No 295

 Issued on February 17, 2017

Tommy W. Smith, II
Quality Assurance Officer

NOTE: This Attachment I supersedes and voids all previous Attachment I documents issued by WV DEP.