



**STATE OF KANSAS**  
DEPARTMENT OF HEALTH AND ENVIRONMENT  
**CERTIFICATE**



This is to certify that Certificate No. E-10419

Geochemical Testing  
2005 North Center Ave  
Somerset, PA 15501-7441

*has been accredited in accordance with K.S.A. 65-1,109a under the standards adopted in K.A.R. 28-15-36 for performing environmental analyses for the parameters listed on the attached form. Continuous accreditation depends on successful, ongoing participation in the program. Clients are urged to verify with this agency the laboratory's certification status for particular methods and analytes.*

EFFECTIVE DATE: 03/14/2016

EXPIRATION DATE: 04/30/2017

Handwritten signature of Susan K. Mosier.

Secretary  
Department of Health and Environment

Handwritten signature of the Section Chief.

Section chief  
Environmental Laboratory Certifications

Lab #	Laboratory Location Address	Telephone/Mailing Address
E-10419	Geochemical Testing 2005 North Center Ave Somerset PA 15501-7441	814-443-1671 2005 North Center Ave Somerset PA 15501-7441

**Waste Water Effective Date: 03/14/2016 Expiration Date:04/30/2017**

**\*\*DEMANDS**

BOD {SM 5210 B}  
COD {HACH 8000}  
Total Organic Carbon {SM 5310C}

**\*\*MINERALS**

Chloride {EPA 300.0}  
Hardness {SM 2340B}  
Sulfate {EPA 300.0}

**\*\*MISCELLANEOUS**

Conductivity {EPA 120.1}  
Hydrogen Ion (pH) {SM 4500-H+ B}  
Phenolics {EPA 420.1}  
Turbidity {EPA 180.1}

**\*\*NUTRIENTS**

Ammonia {EPA 350.1}  
K Nitrogen {EPA 351.2}  
Nitrate {EPA 300.0}  
Nitrite {EPA 300.0}

**\*\*ORGANIC CHEMISTRY VOLATILES (MEASUREMENT BY GC/MS)**

{EPA 624} 1,1-Dichloroethane  
{EPA 624} 1,1-Dichloroethene  
{EPA 624} 1,1,1-Trichloroethane  
{EPA 624} 1,1,2-Trichloroethane  
{EPA 624} 1,1,2,2-Tetrachloroethane  
{EPA 624} 1,2-Dichlorobenzene  
{EPA 624} 1,2-Dichloroethane  
{EPA 624} 1,2-Dichloropropane  
{EPA 624} 1,3-Dichlorobenzene  
{EPA 624} 1,4-Dichlorobenzene  
{EPA 624} 2-Chloroethyl vinyl ether  
{EPA 624} Acrolein  
{EPA 624} Acrylonitrile  
{EPA 624} Benzene  
{EPA 624} Bromodichloromethane  
{EPA 624} Bromoform  
{EPA 624} Bromomethane (Methyl bromide)  
{EPA 624} Carbon tetrachloride  
{EPA 624} Chlorobenzene  
{EPA 624} Chloroethane  
{EPA 624} Chloroform  
{EPA 624} Chloromethane (Methyl chloride)  
{EPA 624} cis-1,3-Dichloropropene  
{EPA 624} Dibromochloromethane  
{EPA 624} Ethylbenzene  
{EPA 624} Methylene chloride (Dichloromethane)  
{EPA 624} Tetrachloroethene (Perchloroethylene)  
{EPA 624} Toluene  
{EPA 624} trans-1,2-Dichloroethene  
{EPA 624} trans-1,3-Dichloropropene  
{EPA 624} Trichloroethene (Trichloroethylene)  
{EPA 624} Trichlorofluoromethane

{EPA 624} Vinyl Chloride

\*\*ORGANIC CHEMISTRY (MEASUREMENT BY GC/MS)

{EPA 625} 1,2,4-Trichlorobenzene  
{EPA 625} 2-Chloronaphthalene  
{EPA 625} 2-Chlorophenol  
{EPA 625} 2-Methyl-4,6-dinitrophenol  
{EPA 625} 2-Nitrophenol  
{EPA 625} 2,2'-Oxybis(1-chloropropane)  
{EPA 625} 2,4-Dichlorophenol  
{EPA 625} 2,4-Dimethylphenol  
{EPA 625} 2,4-Dinitrophenol  
{EPA 625} 2,4-Dinitrotoluene (2,4-DNT)  
{EPA 625} 2,4,6-Trichlorophenol  
{EPA 625} 2,6-Dinitrotoluene  
{EPA 625} 3,3'-Dichlorobenzidine  
{EPA 625} 4-Bromophenyl phenyl ether  
{EPA 625} 4-Chloro-3-methylphenol  
{EPA 625} 4-Chlorophenyl phenyl ether  
{EPA 625} 4-Nitrophenol  
{EPA 625} Acenaphthene  
{EPA 625} Acenaphthylene  
{EPA 625} Anthracene  
{EPA 625} Benzidine  
{EPA 625} Benzo(a)anthracene  
{EPA 625} Benzo(a)pyrene  
{EPA 625} Benzo(b)fluoranthene  
{EPA 625} Benzo(g,h,i)perylene  
{EPA 625} Benzo(k)fluoranthene  
{EPA 625} Benzyl butyl phthalate  
{EPA 625} Bis(2-chloroethoxy)methane  
{EPA 625} Bis(2-chloroethyl)ether  
{EPA 625} Bis(2-ethylhexyl)phthalate  
{EPA 625} Chrysene  
{EPA 625} Di-n-butyl phthalate  
{EPA 625} Di-n-octyl phthalate  
{EPA 625} Dibenzo(a,h)anthracene  
{EPA 625} Diethyl phthalate  
{EPA 625} Dimethyl phthalate  
{EPA 625} Fluoranthene  
{EPA 625} Fluorene  
{EPA 625} Hexachlorobenzene  
{EPA 625} Hexachlorobutadiene  
{EPA 625} Hexachlorocyclopentadiene  
{EPA 625} Hexachloroethane  
{EPA 625} Indeno(1,2,3-cd) pyrene  
{EPA 625} Isophorone  
{EPA 625} N-Nitrosodi-n-propylamine  
{EPA 625} N-Nitrosodimethylamine  
{EPA 625} N-Nitrosodiphenylamine  
{EPA 625} Naphthalene  
{EPA 625} Nitrobenzene  
{EPA 625} Pentachlorophenol  
{EPA 625} Phenanthrene  
{EPA 625} Phenol  
{EPA 625} Pyrene

\*\*RESIDUES

Residue, Filterable (TDS) {SM 2540 C}  
Residue, Non Filterable (TSS) {SM 2540 D}

\*\*SUPPLEMENTAL

{ASTM D1067-06} Alkalinity  
{EPA 624} Dichlorodifluoromethane

{EPA 625} 1,2-Diphenylhydrazine

Solid Waste Effective Date: 03/14/2016 Expiration Date: 04/30/2017

**\*\*METALS**

Antimony {EPA 6020}  
Arsenic {EPA 6020}  
Barium {EPA 6010}  
Beryllium {EPA 6010}  
Cadmium {EPA 6020}  
Calcium {EPA 6010}  
Chromium {EPA 6010}  
Cobalt {EPA 6010}  
Cobalt {EPA 6020}  
Copper {EPA 6020}  
Iron {EPA 6010}  
Lead {EPA 6010}  
Lead {EPA 6020}  
Magnesium {EPA 6010}  
Mercury {EPA 7470A}  
Nickel {EPA 6020}  
Phosphorus {EPA 6010}  
Potassium {EPA 6010}  
Selenium {EPA 6020}  
Silver {EPA 6020}  
Sodium {EPA 6010}  
Thallium {EPA 6020}  
Vanadium {EPA 6010}  
Zinc {EPA 6010}

**\*\*ORGANIC CHEMISTRY VOLATILES (MEASUREMENT BY GC/MS)**

{EPA 8260} 1,1-Dichloroethane  
{EPA 8260} 1,1-Dichloroethene  
{EPA 8260} 1,1-Dichloropropene  
{EPA 8260} 1,1,1-Trichloroethane  
{EPA 8260} 1,1,1,2-Tetrachloroethane  
{EPA 8260} 1,1,2-Trichloroethane  
{EPA 8260} 1,1,2,2-Tetrachloroethane  
{EPA 8260} 1,2-Dichlorobenzene  
{EPA 8260} 1,2-Dichloroethane  
{EPA 8260} 1,2-Dichloropropane  
{EPA 8260} 1,2,3-Trichlorobenzene  
{EPA 8260} 1,2,3-Trichloropropane  
{EPA 8260} 1,2,4-Trichlorobenzene  
{EPA 8260} 1,2,4-Trimethylbenzene  
{EPA 8260} 1,3-Dichlorobenzene  
{EPA 8260} 1,3-Dichloropropane  
{EPA 8260} 1,3,5-Trimethylbenzene  
{EPA 8260} 1,4-Dichlorobenzene  
{EPA 8260} 2-Chloroethyl vinyl ether  
{EPA 8260} 2-Chlorotoluene  
{EPA 8260} 2-Hexanone  
{EPA 8260} 2,2-Dichloropropane  
{EPA 8260} 4-Chlorotoluene  
{EPA 8260} 4-Isopropyltoluene  
{EPA 8260} 4-Methyl-2-Pentanone (MIBK)  
{EPA 8260} Acetone  
{EPA 8260} Acrolein  
{EPA 8260} Acrylonitrile  
{EPA 8260} Benzene  
{EPA 8260} Bromobenzene  
{EPA 8260} Bromochloromethane  
{EPA 8260} Bromodichloromethane  
{EPA 8260} Bromoform

{EPA 8260} Bromomethane (Methyl bromide)  
{EPA 8260} Carbon disulfide  
{EPA 8260} Carbon tetrachloride  
{EPA 8260} Chlorobenzene  
{EPA 8260} Chloroethane  
{EPA 8260} Chloroform  
{EPA 8260} Chloromethane (Methyl chloride)  
{EPA 8260} cis-1,2-Dichloroethylene  
{EPA 8260} cis-1,3-Dichloropropene  
{EPA 8260} Dibromochloromethane  
{EPA 8260} Dibromochloropropane (DBCP)  
{EPA 8260} Dibromomethane  
{EPA 8260} Dichlorodifluoromethane  
{EPA 8260} Dichloromethane (Methylene chloride)  
{EPA 8260} Ethylbenzene  
{EPA 8260} Ethylene dibromide (EDB, 1,2-Dibromoethane)  
{EPA 8260} Hexachlorobutadiene  
{EPA 8260} Isopropylbenzene  
{EPA 8260} meta-Xylene  
{EPA 8260} Methyl ethyl ketone  
{EPA 8260} Methyl tert-butyl ether (MTBE)  
{EPA 8260} n-Butylbenzene  
{EPA 8260} n-Propylbenzene  
{EPA 8260} Naphthalene  
{EPA 8260} ortho-Xylene  
{EPA 8260} para-Xylene  
{EPA 8260} sec-Butylbenzene  
{EPA 8260} Styrene  
{EPA 8260} tert-Butylbenzene  
{EPA 8260} Tetrachloroethene (Perchloroethylene)  
{EPA 8260} Toluene  
{EPA 8260} trans-1,2-Dichloroethylene  
{EPA 8260} trans-1,3-Dichloropropene  
{EPA 8260} Trichloroethene (Trichloroethylene)  
{EPA 8260} Trichlorofluoromethane  
{EPA 8260} Vinyl Acetate  
{EPA 8260} Vinyl chloride

**\*\*ORGANIC CHEMISTRY (MEASUREMENT BY GC)**

{EPA 8081A} 4,4'-DDD  
{EPA 8081A} 4,4'-DDE  
{EPA 8081A} 4,4'-DDT  
{EPA 8081A} Aldrin  
{EPA 8081A} Chlordane (Tech)  
{EPA 8081A} Dieldrin  
{EPA 8081A} Endosulfan I  
{EPA 8081A} Endosulfan II  
{EPA 8081A} Endosulfan Sulfate  
{EPA 8081A} Endrin  
{EPA 8081A} Endrin aldehyde  
{EPA 8081A} Endrin ketone  
{EPA 8081A} Heptachlor  
{EPA 8081A} Heptachlor Epoxide  
{EPA 8081A} Methoxychlor  
{EPA 8081A} Toxaphene (Chlorinated camphene)  
{EPA 8081} alpha-BHC (alpha-Hexachlorocyclohexane)  
{EPA 8081} beta-BHC (beta-Hexachlorocyclohexane)  
{EPA 8081} delta-BHC  
{EPA 8081} gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)  
{EPA 8081} Hexachlorobenzene  
{EPA 8082} PCB-1016  
{EPA 8082} PCB-1221  
{EPA 8082} PCB-1232  
{EPA 8082} PCB-1242

{EPA 8082} PCB-1248  
{EPA 8082} PCB-1254  
{EPA 8082} PCB-1260  
{EPA 8141} Azinphos-methyl (Guthion)  
{EPA 8141} Bolstar (Sulprofos)  
{EPA 8141} Chlorpyrifos  
{EPA 8141} Coumaphos  
{EPA 8141} Demeton-o  
{EPA 8141} Demeton-s  
{EPA 8141} Diazinon  
{EPA 8141} Dichlorvos (DDVP, Dichlorvos)  
{EPA 8141} Disulfoton  
{EPA 8141} Ethoprop  
{EPA 8141} Fensulfothion  
{EPA 8141} Fenthion  
{EPA 8141} Merphos  
{EPA 8141} Mevinphos  
{EPA 8141} Naled  
{EPA 8141} Parathion methyl  
{EPA 8141} Phorate  
{EPA 8141} Ronnel  
{EPA 8141} Stirophos  
{EPA 8141} Tokuthion  
{EPA 8141} Trichloronate  
{EPA 8151} 2,4-D  
{EPA 8151} 2,4-DB  
{EPA 8151} 2,4,5-T  
{EPA 8151} 2,4,5-TP (Silvex)  
{EPA 8151} Dalapon  
{EPA 8151} Dicamba  
{EPA 8151} Dichlorprop  
{EPA 8151} Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)  
{EPA 8151} MCPA  
{EPA 8151} MCPP

**\*\*ORGANIC CHEMISTRY (MEASUREMENT BY GC/MS)**

{EPA 8270} 1,2,4-Trichlorobenzene  
{EPA 8270} 1,2,4,5-Tetrachlorobenzene  
{EPA 8270} 2-Chloronaphthalene  
{EPA 8270} 3-Methylcholanthrene  
{EPA 8270} Acenaphthene  
{EPA 8270} Acenaphthylene  
{EPA 8270} Anthracene  
{EPA 8270} Benzo(a)anthracene  
{EPA 8270} Benzo(a)pyrene  
{EPA 8270} Benzo(b)fluoranthene  
{EPA 8270} Benzo(g,h,i)perylene  
{EPA 8270} Benzo(k)fluoranthene  
{EPA 8270} Chrysene  
{EPA 8270} Dibenzo(a,e)pyrene  
{EPA 8270} Dibenzo(a,h)anthracene  
{EPA 8270} Dibenz(a,j)acridine  
{EPA 8270} Fluoranthene  
{EPA 8270} Fluorene  
{EPA 8270} Hexachlorocyclopentadiene  
{EPA 8270} Hexachloroethane  
{EPA 8270} Indeno(1,2,3-cd) pyrene  
{EPA 8270} Nitrobenzene  
{EPA 8270} Pentachlorobenzene  
{EPA 8270} Phenanthrene  
{EPA 8270} Phenol  
{EPA 8270} Pyrene

**\*\*SUPPLEMENTAL**

{EPA 8260B} Benzotrichloride  
{EPA 8260B} Bromoethane (Ethyl Bromide)  
{EPA 8260} 1,1,2-Trichloro-1,2,2-trifluoroethane  
{EPA 8260} 1,2,3-Trimethylbenzene  
{EPA 8260} Di-isopropylether (DIPE)  
{EPA 8270} 1,2,3,4-Tetrachlorobenzene  
{EPA 8270} 1,2,3,5-Tetrachlorobenzene  
{EPA 8270} 7H-Dibenzo(c,g)carbazole  
{EPA 8270} Benzal chloride  
{EPA 8270} Benzo(j)fluoranthene  
{EPA 8270} Benzyl chloride  
{EPA 8270} Dibenzo(a,h)pyrene  
{EPA 8270} Dibenzo(a,i)pyrene  
{EPA 8270} Dibenz(a,h)acridine