



The American Association for Laboratory Accreditation

World Class Accreditation

# *Accredited DoD ELAP Laboratory*

A2LA has accredited

## **GEL LABORATORIES, LLC**

*Charleston, SC*

for technical competence in the field of

### **Environmental Testing**

In recognition of the successful completion of the A2LA evaluation process that includes an assessment of the laboratory's compliance with ISO/IEC 17025:2005, the 2003 NELAC Chapter 5 Standard, and the requirements of the Department of Defense Environmental Laboratory Accreditation Program (DoD ELAP) as detailed in the DoD Quality Systems Manual for Environmental Laboratories (QSM v4.1); accreditation is granted to this laboratory to perform recognized EPA methods as defined on the associated A2LA Environmental Scope of Accreditation. This accreditation demonstrates technical competence for this defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated 8 January 2009).

Presented this 23rd day of October 2009.



  
\_\_\_\_\_  
President & CEO  
For the Accreditation Council  
Certificate Number 2567.01  
Valid to June 30, 2011

*For the tests or types of tests to which this accreditation applies, please refer to the laboratory's Environmental Scope of Accreditation.*



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

GEL LABORATORIES, LLC  
 2040 Savage Road  
 Charleston, SC 29414  
 Robert L. Pullano Phone: (843) 556-8171  
 rlp@gel.com

ENVIRONMENTAL

Valid To: June 30, 2011

Certificate Number: 2567.01

In recognition of the successful completion of the A2LA evaluation process, (including an assessment of the laboratory's compliance with ISO IEC 17025:2005, the 2003 NELAC Chapter 5 Standard, and the requirements of the DoD Environmental Laboratory Accreditation Program (DoD ELAP) as detailed in the DoD Quality Systems Manual for Environmental Laboratories (DoD QSM v4.1)) accreditation is granted to this laboratory to perform the following radiochemical tests in various matrices, including soils, drinking water, wastewater, groundwater, fiber air filters, vegetation, animal tissues and milk.

	<u>Preparation SOP</u>	<u>Analytical SOP</u>
<u>Alpha Spectrometry:</u> Alpha: Am-241, Am-243, Cf-252, Cm-242, Cm-243/244, Cm-245/246, Np-237, Po-208, Po-209, Po-210, Pu-236, Pu-238, Pu-239/240, Pu-242, Pu-244, Th-228, Th-229, Th-230, Th-232, U-232, U-233/234, U-235/236, U-238	GL-RAD-A-011, GL-RAD-A-016, GL-RAD-A-032, GL-RAD-A-036, GL-RAD-A-038, GL-RAD-A-043, GL-RAD-A-045	GL-RAD-I-009
<u>Radon Emanation:</u> Ra-226	GL-RAD-A-008, GL-RAD-A-028	GL-RAD-I-007
<u>Gamma Spectrometry:</u> Gamma: 46 to 1836 keV, I-129, I-131, Ni-59	GL-RAD-A-006, GL-RAD-A-013, GL-RAD-A-022	GL-RAD-I-001

*Peter Blayze*  
 Page 1 of 13

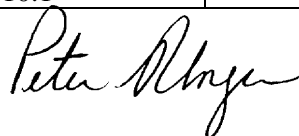
	<u>Preparation SOP</u>	<u>Analytical SOP</u>
<u>Kinetic Phosphorescence Analyzer</u> Total Uranium	GL-RAD-A-023	GL-RAD-B-018
<u>Gas Flow Proportional Counting:</u> Beta: Cl-36, I-131, Pb-210, Ra-228, Sr-89, Sr-90, Total Radium	GL-RAD-A-004, GL-RAD-A-009, GL-RAD-A-010, GL-RAD-A-017, GL-RAD-A-018, GL-RAD-A-029, GL-RAD-A-030, GL-RAD-A-033	GL-RAD-I-006, GL-RAD-I-015, GL-RAD-I-016
Gross Alpha/Gross Beta:	GL-RAD-A-001, GL-RAD-A-001B, GL-RAD-A-001C	GL-RAD-I-006, GL-RAD-I-015, GL-RAD-I-016
48 hour Gross Alpha	GL-RAD-A-047	GL-RAD-I-006, GL-RAD-I-015, GL-RAD-I-016
<u>Liquid Scintillation Spectrometry:</u> Beta: C-14, Ca-45, Fe-55, H-3, Ni-63, P-32, Pm-147, Pu-241, S-35, Se-79, Tc-99  Alpha: Rn-222	GL-RAD-A-002, GL-RAD-A-003, GL-RAD-A-005, GL-RAD-A-007, GL-RAD-A-019, GL-RAD-A-020, GL-RAD-A-022, GL-RAD-A-031, GL-RAD-A-035, GL-RAD-A-040, GL-RAD-A-048, GL-RAD-A-049, GL-RAD-A-050	GL-RAD-I-004, GL-RAD-I-014, GL-RAD-I-017
ICP-MS Uranium Isotopes Tc-99	GL-MA-E-008 GL-RAD-A-005	GL-MA-E-014 GL-RAD-B-034

Additionally, in recognition of the successful completion of the A2LA evaluation process, including an assessment of the laboratory's compliance with ISO IEC 17025:2005, the 2003 NELAC Chapter 5 Standard, and the requirements of the DoD Environmental Laboratory Accreditation Program (DoD ELAP) as detailed in the DoD Quality Systems Manual for Environmental Laboratories (DoD QSM v4.1), accreditation is granted to this laboratory to perform recognized EPA, Standard Methods for the Examination of Water and Wastewater, ASTM, Department of Energy (DOE), California and Connecticut test methods using the following testing technologies and in the analyte categories identified below:

Testing Technologies

Atomic Absorption/ICP-AES Spectrometry, ICP/MS, Gas Chromatography, Gas Chromatography/Mass Spectrometry, Gravimetry, High Performance Liquid Chromatography, Ion Chromatography, Methylene Blue Active Substances, Misc.- Electronic Probes (pH, O<sub>2</sub>), Oxygen Demand, Hazardous Waste Characteristics Tests, Spectrophotometry (Visible), Spectrophotometry (Automated), IR Spectrometry, Titrimetry, Total Organic Carbon, Total Organic Halide, Turbidity, Liquid Chromatography/Mass Spectrometer/Mass Spectrometer and Various Radiochemistry Techniques

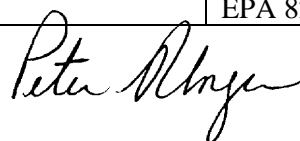
<u>Parameter/Analyte</u>	<u>Nonpotable Water</u>	<u>Solid Hazardous Waste (Liquids and Solids)</u>
Metals		
Aluminum	EPA 6010B/6010C/6020/6020A	EPA 6010B/6010C/6020/6020A
Antimony	EPA 6010B/6010C/6020/6020A	EPA 6010B/6010C/6020/6020A
Arsenic	EPA 6010B/6010C/6020/6020A	EPA 6010B/6010C/6020/6020A
Barium	EPA 6010B/6010C/6020/6020A	EPA 6010B/6010C/6020/6020A
Beryllium	EPA 6010B/6010C/6020/6020A	EPA 6010B/6010C/6020/6020A
Boron	EPA 6010B/6010C/6020/6020A	EPA 6010B/6010C/6020/6020A
Cadmium	EPA 6010B/6010C/6020/6020A	EPA 6010B/6010C/6020/6020A
Calcium	EPA 6010B/6010C/6020/6020A	EPA 6010B/6010C/6020/6020A
Chromium	EPA 6010B/6010C/6020/6020A	EPA 6010B/6010C/6020/6020A
Cobalt	EPA 6010B/6010C/6020/6020A	EPA 6010B/6010C/6020/6020A
Copper	EPA 6010B/6010C/6020/6020A	EPA 6010B/6010C/6020/6020A
Iron	EPA 6010B/6010C/6020/6020A	EPA 6010B/6010C/6020/6020A
Lead	EPA 6010B/6010C/6020/6020A	EPA 6010B/6010C/6020/6020A
Lithium	EPA 6020/6020A	EPA 6020/6020A
Magnesium	EPA 6010B/6010C/6020/6020A	EPA 6010B/6010C/6020/6020A
Manganese	EPA 6010B/6010C/6020/6020A	EPA 6010B/6010C/6020/6020A
Mercury	EPA 1631E/7470/7470A/245.1	EPA 7470/7470A/7471A/7471B
Molybdenum	EPA 6010B/6010C/6020/6020A	EPA 6010B/6010C/6020/6020A
Nickel	EPA 6010B/6010C/6020/6020A	EPA 6010B/6010C/6020/6020A
Phosphorous	EPA 6020/6020A	EPA 6010B/6010C/6020/6020A
Potassium	EPA 6010B/6010C/6020/6020A	EPA 6010B/6010C/6020/6020A
Selenium	EPA 6010B/6010C/6020/6020A	EPA 6010B/6010C/6020/6020A
Silicon <sup>1</sup>	EPA 6010B/6010C modified	EPA 6010B/6010C modified
Silica as SiO <sub>2</sub>	EPA 6010B/6010C	EPA 6010B/6010C
Silver	EPA 6010B/6010C/6020/6020A	EPA 6010B/6010C/6020/6020A
Sodium	EPA 6010B/6010C/6020/6020A	EPA 6010B/6010C/6020/6020A
Strontium	EPA 6010B/6010C/6020/6020A	EPA 6010B/6010C/6020/6020A
Thallium	EPA 6010B/6010C/6020/6020A	EPA 6010B/6010C/6020/6020A
Tin	EPA 6010B/6010C/6020/6020A	EPA 6010B/6010C/6020/6020A
Titanium	EPA 6010B/6010C/6020/6020A	EPA 6010B/6010C/6020/6020A
Tungsten	-----	EPA 6020/6020A
Vanadium	EPA 6010B/6010C/6020/6020A	EPA 6010B/6010C/6020/6020A
Zinc	EPA 6010B/6010C/6020/6020A	EPA 6010B/6010C/6020/6020A
General Chemistry		
Acidity	SM 2310 B/EPA 305.1	-----
Adsorbable Organic Halogens (AOX)	EPA 1650	-----
Alkalinity	SM 2320B/EPA 310.1	-----



<u>Parameter/Analyte</u>	<u>Nonpotable Water</u>	<u>Solid Hazardous Waste (Liquids and Solids)</u>
Ammenable Cyanide	EPA 9012A/9012B/EPA 335.1	EPA 9012A/9012B
Ammonia Nitrogen	EPA 350.1	-----
Biochemical oxygen demand	SM 5210 B/EPA 405.1	-----
Bromide	EPA 9056A/EPA 300.0	EPA 9056A <sup>3</sup>
Carbonaceous BOD	SM 5210 B	-----
Chemical Oxygen Demand (COD)	EPA 410.4	-----
Chloride	EPA 9056A/EPA 300.0	EPA 9056A <sup>3</sup>
Chlorine (residual)	SM 4500Cl-G/EPA 330.5	-----
Chromium VI	EPA 7196A/SM 3500Cr-B	EPA 7196A
Color	SM 2120B/EPA 110.2	-----
Corrosivity toward Steel	-----	EPA 1110/1110A
Cyanide	EPA 9012A/9012B/335.3/335.4	EPA 9012A/9012B
Density	-----	ASTM D 5057
Extractable Organic Halides (EOX)	-----	EPA 9023
Filterable residue	SM 2540C	-----
Fluoride	EPA 9056A/EPA 300.0	EPA 9056A <sup>3</sup>
Ignitability	EPA 1010/1020A/1020B	EPA 1010/1020A/1020B
Hardness	SM 2340B/SM2340C/ EPA 130.2	-----
Kjeldahl Nitrogen	EPA 351.2	-----
MBAS/Surfactants	SM 5540C/EPA 425.1	-----
Moisture Determination	-----	ASTM D-2216 (M)
Nitrate (as N)	EPA 9056A/EPA 300.0	EPA 9056A <sup>3</sup>
Nitrate-nitrite (as N)	EPA 9056A/EPA 300.0	EPA 9056A <sup>3</sup>
Nitrite (as N)	EPA 9056A/EPA 300.0	EPA 9056A <sup>3</sup>
Nonfilterable residue	SM 2540D	-----
Oil & Grease	EPA 1664A	EPA 1664A
Organic Nitrogen	TKN – Ammonia EPA 351.2 – EPA 350.1	-----
Orthophosphate (as P)	EPA 9056A/EPA 300.0	EPA 9056A <sup>3</sup>
Paint Filter Liquids Test	-----	EPA 9095A/9095B
Perchlorate	EPA 314.0/6850	EPA 6850
pH	SM 4500-H <sup>+</sup> B/ EPA 9040B /9040C/9041A/ EPA 150.1	EPA 9040B/9040C/9045C/9045D
Reactive Cyanide	Sec 7.3.3 SW846	Sec 7.3.3 SW846
Reactive Sulfide	Sec 7.3.4 SW846	Sec 7.3.4 SW846
Residue-Volatile	SM 2540E/EPA 160.4	-----
Residue-Settleable	SM 2540F	-----
Specific conductance	EPA 9050A/EPA 120.1	-----
Sulfate	EPA 9056A/EPA 300.0	EPA 9056A <sup>3</sup>
Sulfite	SM 4500-SO <sub>3</sub> B	-----
Sulfide	EPA 9030B/9034	EPA 9030B/9034
Temperature	EPA 170.1	EPA 170.1
Total, fixed, and volatile residue	SM 2540G	-----
Total Nitrate-Nitrite	EPA 353.2	-----
Total Organic Carbon (TOC)	EPA 9060/9060A/ SM 5310D/415.1	EPA 9060/9060A <sup>2</sup>

<u>Parameter/Analyte</u>	<u>Nonpotable Water</u>	<u>Solid Hazardous Waste (Liquids and Solids)</u>
Total Organic Halides (TOX)	EPA 9020B	EPA 9020B <sup>2</sup>
Total Petroleum Hydrocarbons	EPA 1664A	EPA 1664A
Total Phenolics	EPA 9066/EPA 420.4	-----
Total Phosphorous	EPA 365.4	-----
Total residue	SM 2540B	-----
Turbidity	EPA 180.1/SM 2130	EPA 180.1/SM 2130
<u>Organic Analytes</u>		
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8011/8260B	EPA 8260B
1,2 Dibromoethane (EDB)	EPA 8011/8260B	EPA 8260B
<u>Purgeable Organics (Volatiles)</u>		
Acetone	EPA 8260B	EPA 8260B
Acetonitrile	EPA 8260B	EPA 8260B
Acrolein (Propenal)	EPA 8260B	EPA 8260B
Acrylonitrile	EPA 8260B	EPA 8260B
Allyl Chloride	EPA 8260B	EPA 8260B
Benzene	EPA 8260B	EPA 8260B
Benzyl chloride	EPA 8260B	EPA 8260B
Bromobenzene	EPA 8260B	EPA 8260B
Bromochloromethane	EPA 8260B	EPA 8260B
Bromodichloromethane	EPA 8260B	EPA 8260B
Bromoform	EPA 8260B	EPA 8260B
Bromomethane	EPA 8260B	EPA 8260B
2-Butanone (Methyl Ethyl Ketone)	EPA 8015B/8015C/8260B	EPA 8260B
n-Butyl alcohol	EPA 8015B/8015C/8260B	EPA 8260B
n-Butylbenzene	EPA 8260B	EPA 8260B
Sec-Butylbenzene	EPA 8260B	EPA 8260B
Tert-Butylbenzene	EPA 8260B	EPA 8260B
Carbon disulfide	EPA 8260B	EPA 8260B
Carbon tetrachloride	EPA 8260B	EPA 8260B
Chlorobenzene	EPA 8260B	EPA 8260B
Chloroethane	EPA 8260B	EPA 8260B
2-Chloroethyl vinyl ether	EPA 8260B	EPA 8260B
Chloroform	EPA 8260B	EPA 8260B
Chloromethane	EPA 8260B	EPA 8260B
Chloroprene	EPA 8260B	EPA 8260B
2-Chlorotoluene	EPA 8260B	EPA 8260B
4-Chlorotoluene	EPA 8260B	EPA 8260B
Dibromochloromethane	EPA 8260B	EPA 8260B
Dibromomethane	EPA 8260B	EPA 8260B
1,2-Dichlorobenzene	EPA 8260/8270C/8270D	EPA 8260/8270C/8270D
1,3-Dichlorobenzene	EPA 8260/8270C/8270D	EPA 8260/8270C/8270D
1,4-Dichlorobenzene	EPA 8260/8270C/8270D	EPA 8260/8270C/8270D
Dichlorodifluoromethane	EPA 8260B	EPA 8260B
1,1-Dichloroethane	EPA 8260B	EPA 8260B
1,2-Dichloroethane	EPA 8260B	EPA 8260B
1,1-Dichloroethene	EPA 8260B	EPA 8260B
cis-1,2-Dichloroethene	EPA 8260B	EPA 8260B

<u>Parameter/Analyte</u>	<u>Nonpotable Water</u>	<u>Solid Hazardous Waste (Liquids and Solids)</u>
trans-1,2-Dichloroethene	EPA 8260B	EPA 8260B
1,2-Dichloropropane	EPA 8260B	EPA 8260B
1,3-Dichloropropane	EPA 8260B	EPA 8260B
2,2-Dichloropropane	EPA 8260B	EPA 8260B
1,1-Dichloropropene	EPA 8260B	EPA 8260B
cis-1,3-Dichloropropene	EPA 8260B	EPA 8260B
trans-1,3-Dichloropropene	EPA 8260B	EPA 8260B
cis-1,4-Dichloro-2-butene	EPA 8260B	EPA 8260B
trans-1,4-Dichloro-2-butene	EPA 8260B	EPA 8260B
Diethyl ether	EPA 8260B	EPA 8260B
1,4-Dioxane	EPA 8260B	EPA 8260B
Ethyl Acetate	EPA 8015B/8015C/8260B	EPA 8015B/8015C/8260B
Ethyl Benzene	EPA 8260B	EPA 8260B
Ethyl methacrylate	EPA 8260B	EPA 8260B
2-Hexanone	EPA 8260B	EPA 8260B
Hexachlorobutadiene	EPA 8260/8270C/8270D	EPA 8260/8270C/8270D
Isopropylbenzene	EPA 8260B	EPA 8260B
4-Isopropyltoluene	EPA 8260B	EPA 8260B
Iodomethane	EPA 8260B	EPA 8260B
Isobutyl Alcohol	EPA 8015B/8015C/8260B	EPA 8260B
Methacrylonitrile	EPA 8260B	EPA 8260B
Methylene chloride	EPA 8260B	EPA 8260B
Methyl methacrylate	EPA 8260B	EPA 8260B
4-Methyl-2-pentanone	EPA 8260B	EPA 8260B
Methyl tert butyl ether (MTBE)	EPA 8260B	EPA 8260B
Naphthalene	EPA 8260B/8270C/8270D/8310	EPA 8260B/8270C/8270D/8310
2-Nitropropane	EPA 8260B	EPA 8260B
n-Propylbenzene	EPA 8260B	EPA 8260B
Pentachloroethane	EPA 8260B	EPA 8260B
Propionitrile	EPA 8260B	EPA 8260B
Styrene	EPA 8260B	EPA 8260B
1,1,1,2-Tetrachloroethane	EPA 8260B	EPA 8260B
1,1,2,2-Tetrachloroethane	EPA 8260B	EPA 8260B
Tetrachloroethene	EPA 8260B	EPA 8260B
Toluene	EPA 8260B	EPA 8260B
1,1,1-Trichloroethane	EPA 8260B	EPA 8260B
1,1,2-Trichloroethane	EPA 8260B	EPA 8260B
Trichloroethene	EPA 8260B	EPA 8260B
Trichlorofluoromethane	EPA 8260B	EPA 8260B
1,2,3-Trichlorobenzene	EPA 8260B	EPA 8260B
1,2,3-Trichloropropane	EPA 8260B	EPA 8260B
1,2,4-Trichlorobenzene	EPA 8260B/8270C/8270D	EPA 8260B/8270C/8270D
1,1,2-Trichloro-1,2,2- trifluoroethane	EPA 8260B	-----
1,2,4-Trimethylbenzene	EPA 8260B	EPA 8260B
1,3,5-Trimethylbenzene	EPA 8260B	EPA 8260B
Trihalomethanes	EPA 8260B	EPA 8260B
Vinyl acetate	EPA 8260B	EPA 8260B
Vinyl chloride	EPA 8260B	EPA 8260B
Xylenes, total	EPA 8260B	EPA 8260B
o-Xylene	EPA 8260B	EPA 8260B



<u>Parameter/Analyte</u>	<u>Nonpotable Water</u>	<u>Solid Hazardous Waste (Liquids and Solids)</u>
m+p-Xylene	EPA 8260B	EPA 8260B
Semivolatle Compounds		
Acenaphthene	EPA 8270C/8270D/8310	EPA 8270C/8270D/8310
Acenaphthylene	EPA 8270C/8270D/8310	EPA 8270C/8270D/8310
Acetophenone	EPA 8270C/8270D	EPA 8270C/8270D
2-Acetylaminofluorene	EPA 8270C/8270D	EPA 8270C/8270D
4-Aminobiphenyl	EPA 8270C/8270D	EPA 8270C/8270D
Aniline	EPA 8270C/8270D	EPA 8270C/8270D
Anthracene	EPA 8270C/8270D/8310	EPA 8270C/8270D/8310
Aramite	EPA 8270C/8270D	EPA 8270C/8270D
Atrazine	EPA 8270C/8270D	EPA 8270C/8270D
Benzidine	EPA 8270C/8270D	EPA 8270C/8270D
Benzoic acid	EPA 8270C/8270D	EPA 8270C/8270D
Benzo (a) anthracene	EPA 8270C/8270D/8310	EPA 8270C/8270D/8310
Benzo (b) fluoranthene	EPA 8270C/8270D/8310	EPA 8270C/8270D/8310
Benzo (k) fluoranthene	EPA 8270C/8270D/8310	EPA 8270C/8270D/8310
Benzo (ghi) perylene	EPA 8270C/8270D/8310	EPA 8270C/8270D/8310
Benzo (a) pyrene	EPA 8270C/8270D/8310	EPA 8270C/8270D/8310
p-Benzoquinone	EPA 8270C/8270D	EPA 8270C/8270D
Benzyl alcohol	EPA 8270C/8270D	EPA 8270C/8270D
Bis (2-chloroethoxy) methane	EPA 8270C/8270D	EPA 8270C/8270D
Bis (2-chloroethyl) ether	EPA 8270C/8270D	EPA 8270C/8270D
Bis (2-chloroisopropyl) ether	EPA 8270C/8270D	EPA 8270C/8270D
Bis (2-ethylhexyl) phthalate	EPA 8270C/8270D	EPA 8270C/8270D
4-Bromophenyl phenyl ether	EPA 8270C/8270D	EPA 8270C/8270D
Butyl benzyl phthalate	EPA 8270C/8270D	EPA 8270C/8270D
Carbazole	EPA 8270C/8270D	EPA 8270C/8270D
4-Chloroaniline	EPA 8270C/8270D	EPA 8270C/8270D
Chlorobenzilate	EPA 8270C/8270D	EPA 8270C/8270D
4-Chloro-3-methylphenol	EPA 8270C/8270D	EPA 8270C/8270D
2-Chloronaphthalene	EPA 8270C/8270D	EPA 8270C/8270D
2-Chlorophenol	EPA 8270C/8270D	EPA 8270C/8270D
4-Chlorophenyl phenyl ether	EPA 8270C/8270D	EPA 8270C/8270D
Chrysene	EPA 8270C/8270D/8310	EPA 8270C/8270D/8310
n-Decane	EPA 625	-----
Diallate	EPA 8270C/8270D	EPA 8270C/8270D
Dibenzo (a,h) anthracene	EPA 8270C/8270D/8310	EPA 8270C/8270D/8310
Dibenzofuran	EPA 8270C/8270D	EPA 8270C/8270D
Dibenzo (a,e) pyrene	EPA 8270C/8270D	EPA 8270C/8270D
1,2-Dichlorobenzene	EPA 8260B/8270C/8270D	EPA 8260B/8270C/8270D
1,3-Dichlorobenzene	EPA 8260B/8270C/8270D	EPA 8260B/8270C/8270D
1,4-Dichlorobenzene	EPA 8260B/8270C/8270D	EPA 8260B/8270C/8270D
3,3'-Dichlorobenzidine	EPA 8270C/8270D	EPA 8270C/8270D
2,4-Dichlorophenol	EPA 8270C/8270D	EPA 8270C/8270D
2,6-Dichlorophenol	EPA 8270C/8270D	EPA 8270C/8270D
3,3'-Dimethylbenzidine	EPA 8270C/8270D	EPA 8270C/8270D
Diethyl phthalate	EPA 8270C/8270D	EPA 8270C/8270D
Dimethoate	EPA 8270C/8270D	EPA 8270C/8270D
1,3-Dinitrobenzene	EPA 8270C/8270D/8330/8330B	EPA 8270C/8270D/8330/8330B
1,4-Dinitrobenzene	EPA 8270C/8270D	EPA 8270C/8270D

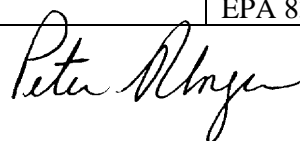
<u>Parameter/Analyte</u>	<u>Nonpotable Water</u>	<u>Solid Hazardous Waste (Liquids and Solids)</u>
Disulfoton	EPA 8270C/8270D	EPA 8270C/8270D
p-Dimethylaminoazobenzene	EPA 8270C/8270D	EPA 8270C/8270D
7,12-Dimethylbenz(a)anthracene	EPA 8270C/8270D	EPA 8270C/8270D
Alpha-,alpha-Dimethylphenethylamine	EPA 8270C/8270D	EPA 8270C/8270D
2,4-Dimethylphenol	EPA 8270C/8270D	EPA 8270C/8270D
Dimethyl phthalate	EPA 8270C/8270D	EPA 8270C/8270D
Di-n-butyl phthalate	EPA 8270C/8270D	EPA 8270C/8270D
Di-n-octyl phthalate	EPA 8270C/8270D	EPA 8270C/8270D
2,4-Dinitrophenol	EPA 8270C/8270D	EPA 8270C/8270D
2,4-Dinitrotoluene	EPA 8270/8330/8330B	EPA 8270/8330/8330B
2,6-Dinitrotoluene	EPA 8270/8330/8330B	EPA 8270/8330/8330B
Diphenylamine	EPA 8270C/8270D	EPA 8270C/8270D
1,2-Diphenylhydrazine	EPA 8270C/8270D	EPA 8270C/8270D
Ethyl methanesulfonate	EPA 8270C/8270D	EPA 8270C/8270D
Famphur	EPA 8270C/8270D	EPA 8270C/8270D
Fluoroanthene	EPA 8270C/8270D/8310	EPA 8270C/8270D/8310
Fluorene	EPA 8270C/8270D/8310	EPA 8270C/8270D/8310
Hexachlorobenzene	EPA 8270C/8270D	EPA 8270C/8270D
Hexachlorobutadiene	EPA 8260B/8270C/8270D	EPA 8260B/8270C/8270D
Hexachlorophene	EPA 8270C/8270D	EPA 8270C/8270D
Hexachloropropene	EPA 8270C/8270D	EPA 8270C/8270D
Hexachlorocyclopentadiene	EPA 8270C/8270D	EPA 8270C/8270D
Hexachloroethane	EPA 8270C/8270D	EPA 8270C/8270D
Indeno (1,2,3-cd) pyrene	EPA 8270C/8270D/8310	EPA 8270C/8270D/8310
Isodrin	EPA 8270C/8270D	EPA 8270C/8270D
Isophorone	EPA 8270C/8270D	EPA 8270C/8270D
Isosafrole	EPA 8270C/8270D	EPA 8270C/8270D
Kepone	EPA 8270C/8270D	EPA 8270C/8270D
Methapyrilene	EPA 8270C/8270D	EPA 8270C/8270D
3-Methylcholanthrene	EPA 8270C/8270D	EPA 8270C/8270D
2-Methyl-4,6-Dinitrophenol	EPA 8270C/8270D	EPA 8270C/8270D
Methyl methanesulfonate	EPA 8270C/8270D	EPA 8270C/8270D
1-Methylnaphthalene	EPA 8270C/8270D	EPA 8270C/8270D
2-Methylnaphthalene	EPA 8270C/8270D	EPA 8270C/8270D
Methyl Parathion	EPA 8270C/8270D	EPA 8270C/8270D
2-Methylphenol (o-cresol)	EPA 8270C/8270D	EPA 8270C/8270D
3/4-Methylphenols(m/p cresols)	EPA 8270C/8270D	EPA 8270C/8270D
Naphthalene	EPA 8260B/8270C/8270D/8310	EPA8260B/8270C/8270D/8310
1,4-Naphthoquinone	EPA 8270C/8270D	-----
1-Naphthylamine	EPA 8270C/8270D	EPA 8270C/8270D
2-Naphthylamine	EPA 8270C/8270D	EPA 8270C/8270D
2-Nitroaniline	EPA 8270C/8270D	EPA 8270C/8270D
3-Nitroaniline	EPA 8270C/8270D	EPA 8270C/8270D
4-Nitroaniline	EPA 8270C/8270D	EPA 8270C/8270D
Nitrobenzene	EPA 8270C/8270D/8330/8330B	EPA 8270C/8270D/8330/8330B
5-Nitro-o-toluidine	EPA 8270C/8270D	EPA 8270C/8270D
2-Nitrophenol	EPA 8270C/8270D	EPA 8270C/8270D
4-Nitrophenol	EPA 8270C/8270D	EPA 8270C/8270D
Nitroquinoline-1-oxide	EPA 8270C/8270D	EPA 8270C/8270D

*Peter Mlynar*

<u>Parameter/Analyte</u>	<u>Nonpotable Water</u>	<u>Solid Hazardous Waste (Liquids and Solids)</u>
N-Nitrosodiethylamine	EPA 8270C/8270D	EPA 8270C/8270D
N-Nitrosodimethylamine	EPA 8270C/8270D	EPA 8270C/8270D
N-Nitrosodi-n-butylamine	EPA 8270C/8270D	EPA 8270C/8270D
N-Nitrosodi-n-propylamine	EPA 8270C/8270D	EPA 8270C/8270D
N-Nitrosodiphenylamine	EPA 8270C/8270D	EPA 8270C/8270D
N-Nitrosodimethylethylamine	EPA 8270C/8270D	EPA 8270C/8270D
N-Nitrosomorpholine	EPA 8270C/8270D	EPA 8270C/8270D
N-Nitrosopiperidine	EPA 8270C/8270D	EPA 8270C/8270D
N-Nitrosopyrrolidine	EPA 8270C/8270D	EPA 8270C/8270D
n-Octadecane	-----	EPA 8270C/8270D
o,o,o-Triethyl phosphorothioate	EPA 8270C/8270D	EPA 8270C/8270D
o-Toluidine	EPA 8270C/8270D	EPA 8270C/8270D
Parathion, ethyl	EPA 8270C/8270D	EPA 8270C/8270D
Pentachlorobenzene	EPA 8270C/8270D	EPA 8270C/8270D
Pentachloronitrobenzene	EPA 8270C/8270D	EPA 8270C/8270D
Pentachlorophenol	EPA 8270C/8270D/8151A	EPA 8270C/8270D/8151A
Phenacetin	EPA 8270C/8270D	EPA 8270C/8270D
Phenanthrene	EPA 8270C/8270D/8310	EPA 8270C/8270D/8310
Phenol	EPA 8270C/8270D	EPA 8270C/8270D
1,4-Phenylenediamine	EPA 8270C/8270D	-----
Phorate	EPA 8270C/8270D	EPA 8270C/8270D
2-Picoline (2-Methylpyridine)	EPA 8270C/8270D	EPA 8270C/8270D
Pronamide (Kerb)	EPA 8270C/8270D	EPA 8270C/8270D
Pyrene	EPA 8270C/8270D/8310	EPA 8270C/8270D/8310
Pyridine	EPA 8270C/8270D	EPA 8270C/8270D
Safrole	EPA 8270C/8270D	EPA 8270C/8270D
Sulfotepp	EPA 8270C/8270D	EPA 8270C/8270D
1,2,4,5-Tetrachlorobenzene	EPA 8270C/8270D	EPA 8270C/8270D
2,3,4,6-Tetrachlorophenol	EPA 8270C/8270D	EPA 8270C/8270D
Thionazin (Zinophos)	EPA 8270C/8270D	EPA 8270C/8270D
1,2,4-Trichlorobenzene	EPA 8260B/8270C/8270D	EPA 8260B/8270C/8270D
2,4,5-Trichlorophenol	EPA 8270C/8270D	EPA 8270C/8270D
2,4,6-Trichlorophenol	EPA 8270C/8270D	EPA 8270C/8270D
1,3,5-Trinitrobenzene	EPA 8270C/8270D/8330/8330B	EPA 8270C/8270D/8330/8330B
Pesticides & PCBs		
Aldrin	EPA 8081A/8081B	EPA 8081A/8081B
alpha-BHC	EPA 8081A/8081B	EPA 8081A/8081B
alpha-Chlordane	EPA 8081A/8081B	EPA 8081A/8081B
beta-BHC	EPA 8081A/8081B	EPA 8081A/8081B
Chlordane (technical)	EPA 8081A/8081B	EPA 8081A/8081B
delta-BHC	EPA 8081A/8081B	EPA 8081A/8081B
gamma-BHC	EPA 8081A/8081B	EPA 8081A/8081B
gamma-Chlordane	EPA 8081A/8081B	EPA 8081A/8081B
4,4'-DDD	EPA 8081A/8081B	EPA 8081A/8081B
4,4'-DDE	EPA 8081A/8081B	EPA 8081A/8081B
4,4',-DDT	EPA 8081A/8081B	EPA 8081A/8081B
Dieldrin	EPA 8081A/8081B	EPA 8081A/8081B
Endosulfan I	EPA 8081A/8081B	EPA 8081A/8081B
Endosulfan II	EPA 8081A/8081B	EPA 8081A/8081B



<u>Parameter/Analyte</u>	<u>Nonpotable Water</u>	<u>Solid Hazardous Waste (Liquids and Solids)</u>
Endonsulfan sulfate	EPA 8081A/8081B	EPA 8081A/8081B
Endrin	EPA 8081A/8081B	EPA 8081A/8081B
Endrin aldehyde	EPA 8081A/8081B	EPA 8081A/8081B
Endrin ketone	EPA 8081A/8081B	EPA 8081A/8081B
Heptachlor	EPA 8081A/8081B	EPA 8081A/8081B
Heptachlor epoxide	EPA 8081A/8081B	EPA 8081A/8081B
Methoxychlor	EPA 8081A/8081B	EPA 8081A/8081B
Toxaphene	EPA 8081A/8081B	EPA 8081A/8081B
PCB-1016 (Aroclor)	EPA 8082/8082A	EPA 8082/8082A
PCB-1221	EPA 8082/8082A	EPA 8082/8082A
PCB-1232	EPA 8082/8082A	EPA 8082/8082A
PCB-1242	EPA 8082/8082A	EPA 8082/8082A
PCB-1248	EPA 8082/8082A	EPA 8082/8082A
PCB-1254	EPA 8082/8082A	EPA 8082/8082A
PCB-1260	EPA 8082/8082A	EPA 8082/8082A
PCB-1262	EPA 8082/8082A	EPA 8082/8082A
PCB-1268	EPA 8082/8082A	EPA 8082/8082A
Total Aroclors	EPA 8082/8082A	EPA 8082/8082A
FID Compounds		
Ethyl acetate	EPA 8015B/8015C/8260B	EPA 8015B/8015C/8260B
Ethylene Glycol	EPA 8015B/8015C	EPA 8015B/8015C
Isobutyl Alcohol	EPA 8015B/8015C/8260B	EPA 8260B
Isopropyl Alcohol (2-Propanol)	EPA 8015B/8015C	-----
Methanol	EPA 8015B/8015C	EPA 8015B/8015C
Diesel Range Organics (DRO)	EPA 8015B/8015C/CA-LUFT/ CT-ETPH	EPA 8015B/8015C/CA-LUFT/ CT-ETPH
Gas Range Organics (GRO)	EPA 8015B/8015C/CA-LUFT	EPA 8015B/8015C/CA-LUFT
Herbicides		
2,4-D	EPA 8151A	EPA 8151A
2,4-DB	EPA 8151A	EPA 8151A
Dalapon	EPA 8151A	EPA 8151A
Dicamba	EPA 8151A	EPA 8151A
Dichloroprop	EPA 8151A	EPA 8151A
Dinoseb	EPA 8151A	EPA 8151A
MCPA	EPA 8151A	EPA 8151A
MCPP	EPA 8151A	EPA 8151A
2,4,5-T	EPA 8151A	EPA 8151A
2,4,5-TP (Silvex)	EPA 8151A	EPA 8151A
Pentachlorophenol	EPA 8151A	EPA 8151A
Nitrosamines, Nitroaromatics		
1,3-Dinitrobenzene	EPA 8270C/8270D/8330/8330B	EPA 8270C/8270D/8330/8330B
2,4-Dinitrotoluene	EPA 8270C/8270D/8330/8330B	EPA 8270C/8270D/8330/8330B
2,6-Dinitrotoluene	EPA 8270C/8270D/8330/8330B	EPA 8270C/8270D/8330/8330B
2,4,6-Trinitrotoluene	EPA 8330/8330B	EPA 8330/8330B
2-Amino-4,6-Dinitrotoluene	EPA 8330/8330B	EPA 8330/8330B
2-Nitrotoluene	EPA 8330/8330B	EPA 8330/8330B
3-Nitrotoluene	EPA 8330/8330B	EPA 8330/8330B
4-Amino-2,6-Dinitrotoluene	EPA 8330/8330B	EPA 8330/8330B

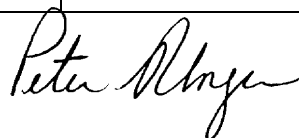


<u>Parameter/Analyte</u>	<u>Nonpotable Water</u>	<u>Solid Hazardous Waste (Liquids and Solids)</u>
4-Nitrotoluene	EPA 8330/8330B	EPA 8330/8330B
Nitrobenzene	EPA 8270C/8270D/8330/8330B	EPA 8270C/8270D/8330/8330B
Nitroglycerine	EPA 8330/8330B	EPA 8330/8330B
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	EPA 8330/8330B	EPA 8330/8330B
Pentaerythritoltetranitrate (PETN)	EPA 8330/8330B	EPA 8330/8330B
hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	EPA 8330/8330B	EPA 8330/8330B
Tetryl (methyl-2,4,6-trinitrophenylnitramine)	EPA 8330/8330B	EPA 8330/8330B
<u>Radiochemistry</u>		
Barium 133	DOE 4.5.2.3	DOE 4.5.2.3
Cesium 134	DOE 4.5.2.3/EPA 901.1	DOE 4.5.2.3
Cesium 137	DOE 4.5.2.3/EPA 901.1	DOE 4.5.2.3
Cobalt-60	DOE 4.5.2.3/EPA 901.1	DOE 4.5.2.3
Gamma Emitters	DOE 4.5.2.3/EPA 901.1	DOE 4.5.2.3
Gross Alpha	EPA 900.0/9310	EPA 9310
Gross Beta	EPA 900.0/9310	EPA 9310
Radioactive Iodine	DOE 4.5.2.3/EPA 901.1/902.0	DOE 4.5.2.3
Radium-226	EPA 903.1/DOE Ra-04	DOE Ra-04
Radium-228	EPA 904.0/9320/DOE 4.5.2.3	DOE 4.5.2.3/EPA9320
Total Radium	EPA 9315	EPA 9315
Radon	SM7500 Rn-B	-----
Strontium-89	EPA 905.0	DOE Sr-01
Strontium-90	EPA 905.0/DOE Sr-02	DOE Sr-02
Thorium	DOE 4.5.5	DOE 4.5.5
Tritium	EPA 906.0	-----
Uranium	ASTM D5174-02/D5174-97/DOE U-02/EPA 6020/6020A	DOE U-02/EPA 6020/6020A
Zinc-65	EPA 901.1/DOE 4.5.2.3	DOE 4.5.2.3
<u>Preparatory and Clean-up Methods</u>		
Toxicity Characteristic Leaching Procedure (Inorganics, Extractable Organics, Volatile Organics)	-----	EPA 1311
Synthetic Preparation Leaching Procedure	-----	EPA 1312
Waste Extraction Test (W.E.T.)	-----	CCR Chapter 11, Article 5, Appendix II
Anion Preparation	-----	EPA 9056A <sup>3</sup>
Cyanide Distillation	EPA 9010B/9010C	EPA 9010B/9010C <sup>3</sup>
Sulfide Distillation	EPA 9030B	EPA 9030B
Metals Digestion	EPA 200.2, 3005A, 3010A	EPA 3050B
Alkaline Digestion for Hexavalent Chromium	-----	EPA 3060A
Bomb Preparation for Solid Waste	-----	EPA 5050

<u>Parameter/Analyte</u>	<u>Nonpotable Water</u>	<u>Solid Hazardous Waste (Liquids and Solids)</u>
Mercury Preparation	EPA 7470/7470A	EPA 7471A/7471B
Separatory Funnel Liquid-Liquid Extraction	EPA 3510C	-----
Continuous Liquid-Liquid Extraction	EPA 3520C	-----
Solid Phase Extraction	EPA 3535A	-----
Automated Soxhlet Extraction	-----	EPA 3541
Ultrasonic Extraction	-----	EPA 3550C
Waste Dilution	-----	EPA 3580A
Waste Dilution for Volatile Organics	-----	EPA 3585
Purge and Trap for Volatile Organics	EPA 5030A/5030B/5030C	EPA 5035/5035A
Alumina Clean-up	-----	EPA 3610B/3611B
Florisil Clean-up	-----	EPA 3620B/3620C
Silica Gel Clean-up	-----	EPA 3630C
Gel Permeation Clean-up	-----	EPA 3640A
Sulfur Clean-up	-----	EPA 3660B
Sulfuric Acid/Permanganate Clean-up	-----	EPA 3665A

Additionally, in recognition of the successful completion of the A2LA evaluation process (including an assessment of the laboratory's compliance with the 2003 NELAC Chapter 5 Requirements), accreditation is granted to this laboratory to perform the following bioassay analyses on bone, tissue, urine, fecal, and nasal swabs.

	<u>Preparation SOP</u>	<u>Analytical SOP</u>
<u>Bioassay Analysis</u>		
<u>Alpha Spectrometry:</u> Alpha: Am-241, Cm-242, Cm-243/244, Cm-245/246, Cf-252, Np-237, Po-208, Po-209, Po-210, Pu-236, Pu-238, Pu-239/240, Pu-242, Pu-244, Th-228, Th-229, Th-230, Th-232, U-232, U-233/234, U-235/236, U-238	GL-RAD-B-001, GL-RAD-B-002, GL-RAD-B-003, GL-RAD-B-010, GL-RAD-B-012, GL-RAD-B-013, GL-RAD-B-017	GL-RAD-B-009
<u>Liquid Scintillation Spectrometry:</u> C-14, Gross Alpha, H-3, Ni-63, Pu-241, Tc-99	GL-RAD-B-001, GL-RAD-B-008, GL-RAD-B-011, GL-RAD-B-012, GL-RAD-B-013, GL-RAD-B-016, GL-RAD-B-020, GL-RAD-B-023	GL-RAD-I-004, GL-RAD-I-014, GL-RAD-I-017
<u>Gas Flow Proportional Counting:</u> Beta: Sr-90	GL-RAD-B-001	GL-RAD-I-006, GL-RAD-I-015, GL-RAD-I-016



	<u>Preparation SOP</u>	<u>Analytical SOP</u>
<u>Bioassay Analysis</u>		
Gross Alpha/Gross Beta:	GL-RAD-B-022	GL-RAD-I-006
<u>Kinetic Phosphorescence Analyzer</u> Total Uranium	GL-RAD-B-019	GL-RAD-B-018
<u>Radon Emanation:</u> Ra-226	GL-RAD-B-002	GL-RAD-I-007
<u>Refractometer</u> Specific Gravity	GL-RAD-B-027	GL-RAD-B-027
<u>ICP-MS</u> Uranium Isotopes	GL-RAD-B-035	GL-RAD-B-027
<u>Gamma Spectrometry:</u> Gamma: Ni-59, 46 to 1836 keV	GL-RAD-B-020, GL-RAD-A-013	GL-RAD-I-001

Finally, accreditation is also granted to this laboratory to perform the following tests on children's toys:

<u>Chemical</u>	
Lead in Paint by ICP	16 CFR part 1303 (using GL-MA-E-009 and GL-MA-E-013)

1 - Calculated from silica determination

2 – Applicable only to liquid 'Solid Hazardous Waste', where liquids may include aqueous, non-aqueous, and oily wastes. Solids may include soils, sediments, sludges, tissues, filters and any matrix deemed non-liquid.

3 – The referenced method is modified to include a simple prep for non-aqueous and/or solid matrix samples.