

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



NELAP-Recognized

This is to certify that Certificate No. E-10385

PEL, A Division of Spectrum Analytical, Featuring Hanibal Technology  
 8405 Suite A Benjamin Road  
 Tampa, FL 33634-1211

has been accredited in accordance with K.S.A. 65-1,109a 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: 04/14/2009

EXPIRATION DATE: 04/30/2010

*Robert J. Long*

Secretary  
 Department of Health and Environment

*Jack R. McHenry*

Environmental Laboratory Certification Officer



*Kathleen Sebelius, Governor  
Roderick L. Bremby, Secretary*

DEPARTMENT OF HEALTH  
AND ENVIRONMENT

[www.kdheks.gov](http://www.kdheks.gov)

Division of Environment



NELAP-RECOGNIZED

### MEMORANDUM

**TO:** BRIAN C. SPANN  
PEL, A DIVISION OF SPECTRUM ANALYTICAL, FEATURING HANIBAL  
TECHNOLOGY  
830 SILVER STREET  
AGAWAM, MA 01001-2990

**FROM:** Jack McKenzie  
Laboratory Improvement Specialist

Enclosed please find your NELAP certificate of accreditation. Also, note the effective and expiration dates of your new accreditation and be sure to review the parameters listed. It is possible your laboratory applied for parameters not listed on the enclosed accreditation. Those parameters have been denied. If there are any questions concerning the parameters listed, contact this office at (785) 296-1639-Jack.

It is essential the laboratory accreditation officer be notified within 30 days of any changes in laboratory director, methods which involve a change in technology, change in ownership, or change in location.

An application packet for re-accreditation will be mailed to you approximately five (5) months prior to the expiration date of your current accreditation.

Enclosure/s

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT  
ENVIRONMENTAL LABORATORY ACCREDITATION  
CLEAN WATER ACT PROGRAM - NON-POTABLE WATER MATRIX

PAGE: 1

**This certificate supersedes all previous certificates**

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Certificate Number: E-10385  
Effective Date: 04/14/2009  
Expiration Date: 04/30/2010  
Reciprocity: FL

The laboratory listed above is hereby approved for environmental laboratory accreditation in accordance with K.S.A. 65-1, 109a for the following:

**\*\*METALS - 503 Regs**

Arsenic {EPA 6010}  
Cadmium {EPA 6010}  
Copper {EPA 6010}  
Lead {EPA 6010}  
Mercury {EPA 7470}  
Molybdenum {EPA 6010}  
Nickel {EPA 6010}  
Selenium {EPA 6010}  
Zinc {EPA 6010}

**\*\*MINERALS**

Chloride {EPA 300.1}  
Fluoride {EPA 300.1}  
Sulfate {EPA 300.1}

**\*\*MISCELLANEOUS**

Oil & Grease {EPA 1664}

**\*\*NUTRIENTS**

Nitrate-Nitrite {EPA 300.1}  
Nitrate {EPA 300.1}  
Nitrite {EPA 300.1}  
Ortho-phosphate {EPA 300.1}



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**\*\*CHARACTERISTICS**

Synthetic-Precipitation Leaching Procedure {EPA 1312}  
Toxic-Characteristic-Leaching Procedure {EPA 1311}

**\*\*METALS**

Aluminum {EPA 6010}  
Antimony {EPA 6010}  
Arsenic {EPA 6010}  
Barium {EPA 6010}  
Beryllium {EPA 6010}  
Cadmium {EPA 6010}  
Calcium {EPA 6010}  
Chromium {EPA 6010}  
Cobalt {EPA 6010}  
Copper {EPA 6010}  
Iron {EPA 6010}  
Lead {EPA 6010}  
Magnesium {EPA 6010}  
Manganese {EPA 6010}  
Mercury {EPA 7470}  
Mercury {EPA 7471}  
Molybdenum {EPA 6010}  
Nickel {EPA 6010}  
Potassium {EPA 6010}  
Selenium {EPA 6010}  
Silver {EPA 6010}  
Sodium {EPA 6010}  
Thallium {EPA 6010}  
Tin {EPA 6010}  
Vanadium {EPA 6010}  
Zinc {EPA 6010}



**\*\*MISCELLANEOUS**

Hydrogen Ion (pH) {EPA 9045}

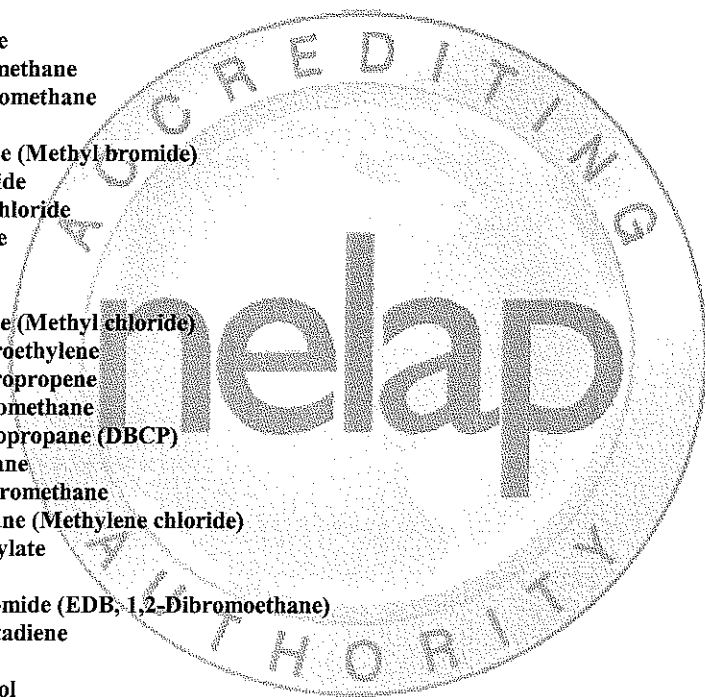
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**\*\*ORGANIC CHEMISTRY VOLATILES (MEASUREMENT BY GC/MS)**

{EPA 8260} 1-Chlorohexane  
{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

RCRA PROGRAM - NON-POTABLE WATER AND SOLID/CHEMICAL WASTE MATRICES

- {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} 1,4-Dioxane
- {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} Acetonitrile
- {EPA 8260} Acrolein
- {EPA 8260} Acrylonitrile
- {EPA 8260} Allyl Chloride
- {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} Ethyl methacrylate
- {EPA 8260} Ethylbenzene
- {EPA 8260} Ethylene dibromide (EDB; 1,2-Dibromoethane)
- {EPA 8260} Hexachlorobutadiene
- {EPA 8260} Iodomethane
- {EPA 8260} Isobutyl Alcohol
- {EPA 8260} Isopropylbenzene
- {EPA 8260} meta-Xylene
- {EPA 8260} Methacrylonitrile
- {EPA 8260} Methyl ethyl ketone
- {EPA 8260} Methyl tert-butyl ether (MTBE)
- {EPA 8260} Methylmethacrylate
- {EPA 8260} n-Butylbenzene
- {EPA 8260} n-Propylbenzene
- {EPA 8260} Naphthalene
- {EPA 8260} ortho-Xylene
- {EPA 8260} para-Xylene
- {EPA 8260} Propionitrile
- {EPA 8260} sec-Butylbenzene
- {EPA 8260} Styrene
- {EPA 8260} tert-Butylbenzene
- {EPA 8260} Toluene
- {EPA 8260} trans-1,2-Dichloroethylene
- {EPA 8260} trans-1,3-Dichloropropene
- {EPA 8260} trans-1,4-Dichloro-2-butene



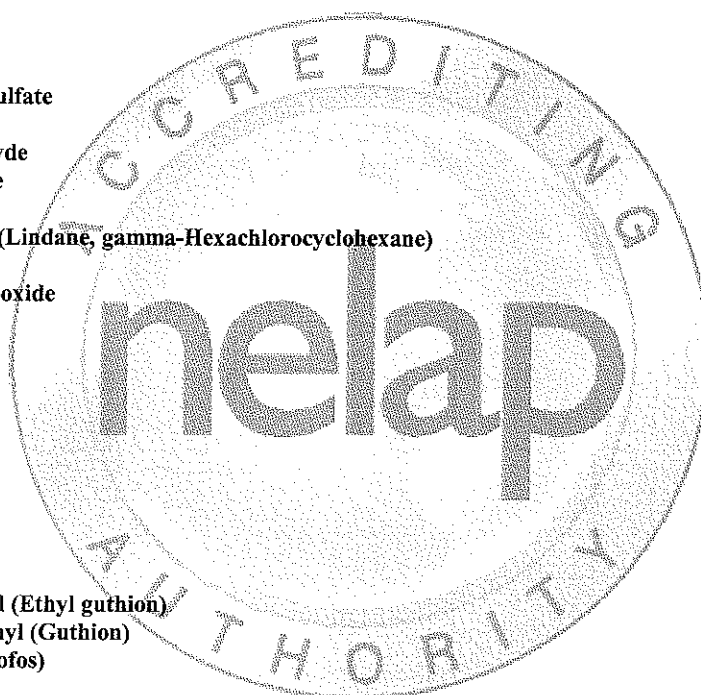
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RCRA PROGRAM - NON-POTABLE WATER AND SOLID/CHEMICAL WASTE MATRICES

- {EPA 8260} Trichloroethene (Trichloroethylene)
- {EPA 8260} Trichlorofluoromethane
- {EPA 8260} Vinyl Acetate
- {EPA 8260} Vinyl chloride

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

- {EPA 8011} Dibromochloropropane (DBCP)
- {EPA 8011} Ethylene dibromide (EDB, 1,2-Dibromoethane)
- {EPA 8081} 4,4'-DDD
- {EPA 8081} 4,4'-DDE
- {EPA 8081} 4,4'-DDT
- {EPA 8081} Aldrin
- {EPA 8081} alpha-BHC (alpha-Hexachlorocyclohexane)
- {EPA 8081} alpha-Chlordane
- {EPA 8081} beta-BHC (beta-Hexachlorocyclohexane)
- {EPA 8081} Chlordane (Tech)
- {EPA 8081} delta-BHC
- {EPA 8081} Dieldrin
- {EPA 8081} Endosulfan I
- {EPA 8081} Endosulfan II
- {EPA 8081} Endosulfan Sulfate
- {EPA 8081} Endrin
- {EPA 8081} Endrin aldehyde
- {EPA 8081} Endrin ketone
- {EPA 8081} g-Chlordane
- {EPA 8081} gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)
- {EPA 8081} Heptachlor
- {EPA 8081} Heptachlor epoxide
- {EPA 8081} Methoxychlor
- {EPA 8081} Toxaphene
- {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} Atrazine
- {EPA 8141} Azinphos-ethyl (Ethyl guthion)
- {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} Dichlorovos (DDVP, Dichlorvos)
- {EPA 8141} Dimethoate
- {EPA 8141} Disulfoton
- {EPA 8141} EPN
- {EPA 8141} Ethion
- {EPA 8141} Ethoprop
- {EPA 8141} Famphur
- {EPA 8141} Fensulfothion
- {EPA 8141} Fenthion
- {EPA 8141} Leptophos
- {EPA 8141} Malathion
- {EPA 8141} Merphos
- {EPA 8141} Mevinphos
- {EPA 8141} Naled
- {EPA 8141} Parathion ethyl



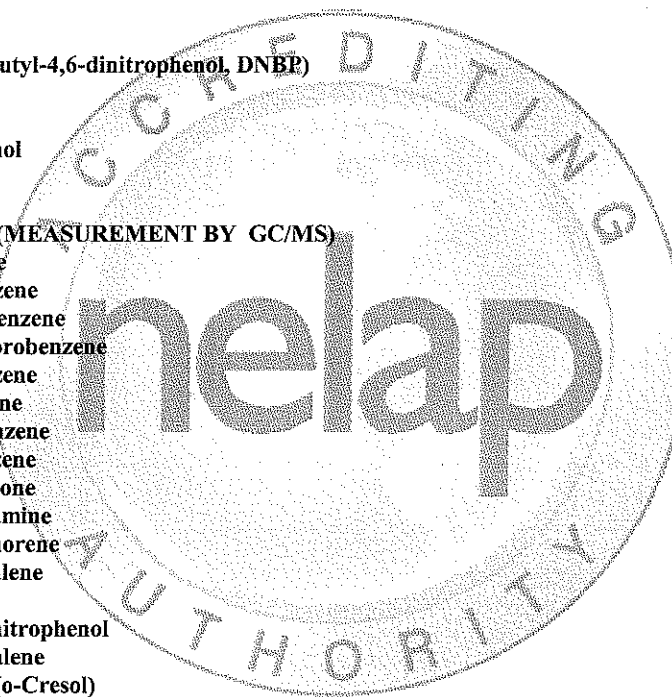
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RCRA PROGRAM - NON-POTABLE WATER AND SOLID/CHEMICAL WASTE MATRICES

{EPA 8141} Parathion methyl  
{EPA 8141} Phorate  
{EPA 8141} Phosphamidon  
{EPA 8141} Ronnel  
{EPA 8141} Simazine  
{EPA 8141} Stirophos  
{EPA 8141} TEPP  
{EPA 8141} Terbufos  
{EPA 8141} Tetraethyl dithiopyrophosphate (Sulfotepp)  
{EPA 8141} Thionazine  
{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  
{EPA 8151} Pentachlorophenol  
{EPA 8151} Picloram

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

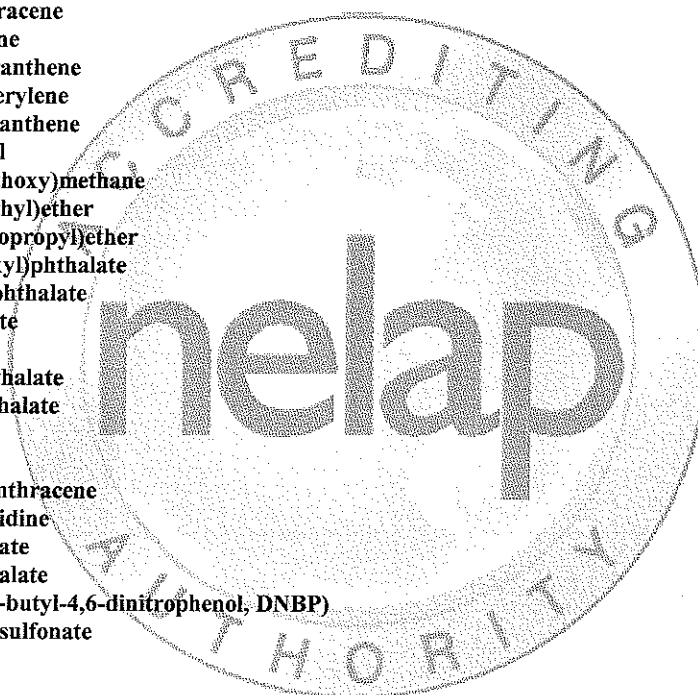
{EPA 8270} 1-Naphthylamine  
{EPA 8270} 1,2-Dichlorobenzene  
{EPA 8270} 1,2,4-Trichlorobenzene  
{EPA 8270} 1,2,4,5-Tetrachlorobenzene  
{EPA 8270} 1,3-Dichlorobenzene  
{EPA 8270} 1,3-Dinitrobenzene  
{EPA 8270} 1,3,5-Trinitrobenzene  
{EPA 8270} 1,4-Dichlorobenzene  
{EPA 8270} 1,4-Naphthoquinone  
{EPA 8270} 1,4-Phenylenediamine  
{EPA 8270} 2-Acetylaminofluorene  
{EPA 8270} 2-Chloronaphthalene  
{EPA 8270} 2-Chlorophenol  
{EPA 8270} 2-Methyl-4,6-Dinitrophenol  
{EPA 8270} 2-Methylnaphthalene  
{EPA 8270} 2-Methylphenol (o-Cresol)  
{EPA 8270} 2-Naphthylamine  
{EPA 8270} 2-Nitroaniline  
{EPA 8270} 2-Nitrophenol  
{EPA 8270} 2-Picoline  
{EPA 8270} 2,3,4,6-Tetrachlorophenol  
{EPA 8270} 2,4-Dichlorophenol  
{EPA 8270} 2,4-Dimethylphenol  
{EPA 8270} 2,4-Dinitrophenol  
{EPA 8270} 2,4-Dinitrotoluene (2,4-DNT)  
{EPA 8270} 2,4,5-Trichlorophenol  
{EPA 8270} 2,4,6-Trichlorophenol  
{EPA 8270} 2,6-Dichlorophenol  
{EPA 8270} 2,6-Dinitrotoluene  
{EPA 8270} 3-Methylcholanthrene  
{EPA 8270} 3-Nitroaniline  
{EPA 8270} 3,3'-Dichlorobenzidine  
{EPA 8270} 3,3'-Dimethylbenzidine  
{EPA 8270} 4-Aminobiphenyl  
{EPA 8270} 4-Bromophenyl phenyl ether



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RCRA PROGRAM - NON-POTABLE WATER AND SOLID/CHEMICAL WASTE MATRICES

- {EPA 8270} 4-Chloro-3-methylphenol
- {EPA 8270} 4-Chloroaniline
- {EPA 8270} 4-Chlorophenyl phenyl ether
- {EPA 8270} 4-Methylphenol (p-Cresol)
- {EPA 8270} 4-Nitroaniline
- {EPA 8270} 4-Nitrophenol
- {EPA 8270} 5-Nitro-o-toluidine
- {EPA 8270} 7,12-Dimethylbenz(a)anthracene
- {EPA 8270} Acenaphthene
- {EPA 8270} Acenaphthylene
- {EPA 8270} Acetophenone
- {EPA 8270} alpha-alpha-Dimethylphenethylamine
- {EPA 8270} Aniline
- {EPA 8270} Anthracene
- {EPA 8270} Aramite
- {EPA 8270} Benzidine
- {EPA 8270} Benzoic acid
- {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} Benzyl alcohol
- {EPA 8270} Bis(2-chloroethoxy)methane
- {EPA 8270} Bis(2-chloroethyl)ether
- {EPA 8270} Bis(2-chloroisopropyl)ether
- {EPA 8270} Bis(2-ethylhexyl)phthalate
- {EPA 8270} Butyl benzyl phthalate
- {EPA 8270} Chlorobenzilate
- {EPA 8270} Chrysene
- {EPA 8270} Di-n-butyl phthalate
- {EPA 8270} Di-n-octyl phthalate
- {EPA 8270} Diallate
- {EPA 8270} Dibenzofuran
- {EPA 8270} Dibenzo(a,h)anthracene
- {EPA 8270} Dibenz(a,j)acridine
- {EPA 8270} Diethyl phthalate
- {EPA 8270} Dimethyl phthalate
- {EPA 8270} Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)
- {EPA 8270} Ethyl methanesulfonate
- {EPA 8270} Fluoranthene
- {EPA 8270} Fluorene
- {EPA 8270} Hexachlorobenzene
- {EPA 8270} Hexachlorobutadiene
- {EPA 8270} Hexachlorocyclopentadiene
- {EPA 8270} Hexachloroethane
- {EPA 8270} Hexachloropropene
- {EPA 8270} Indeno(1,2,3-cd) pyrene
- {EPA 8270} Isodrin
- {EPA 8270} Isophorone
- {EPA 8270} Isosafrole
- {EPA 8270} Kepone
- {EPA 8270} N-nitroso-di-n-butylamine (NDBA)
- {EPA 8270} N-nitroso-di-n-propylamine (NDPA)
- {EPA 8270} N-nitrosodiethylamine (NDEA)
- {EPA 8270} N-nitrosodimethylamine (NDMA)
- {EPA 8270} N-Nitrosodiphenylamine
- {EPA 8270} N-Nitrosomethylethylamine
- {EPA 8270} N-Nitrosomorpholine
- {EPA 8270} N-Nitrosopiperidine
- {EPA 8270} N-Nitrosopyrrolidine



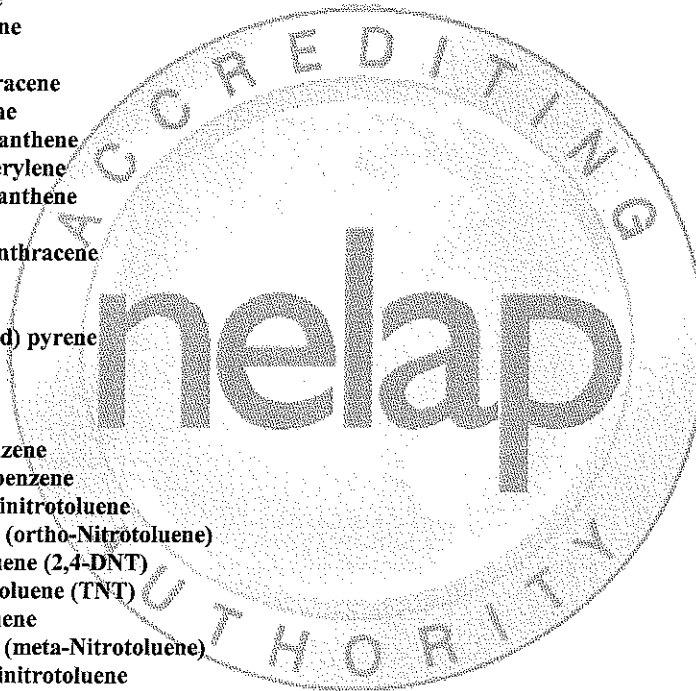
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RCRA PROGRAM - NON-POTABLE WATER AND SOLID/CHEMICAL WASTE MATRICES

- {EPA 8270} Naphthalene
- {EPA 8270} Nitrobenzene
- {EPA 8270} Nitroquinoline-1-oxide
- {EPA 8270} o-Toluidine
- {EPA 8270} O,O,O-Triethylphosphorothioate
- {EPA 8270} Pentachlorobenzene
- {EPA 8270} Pentachloronitrobenzene (PCNB)
- {EPA 8270} Pentachlorophenol
- {EPA 8270} Phenacetin
- {EPA 8270} Phenanthrene
- {EPA 8270} Phenol
- {EPA 8270} Pronamide (Kerb)
- {EPA 8270} Pyrene
- {EPA 8270} Pyridine
- {EPA 8270} Safrole

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

- {EPA 8310} Acenaphthene
- {EPA 8310} Acenaphthylene
- {EPA 8310} Anthracene
- {EPA 8310} Benzo(a)anthracene
- {EPA 8310} Benzo(a)pyrene
- {EPA 8310} Benzo(b)fluoranthene
- {EPA 8310} Benzo(g,h,i)perylene
- {EPA 8310} Benzo(k)fluoranthene
- {EPA 8310} Chrysene
- {EPA 8310} Dibenzo(a,h)anthracene
- {EPA 8310} Fluoranthene
- {EPA 8310} Fluorene
- {EPA 8310} Indeno(1,2,3-cd) pyrene
- {EPA 8310} Naphthalene
- {EPA 8310} Phenanthrene
- {EPA 8310} Pyrene
- {EPA 8330} 1,3-Dinitrobenzene
- {EPA 8330} 1,3,5-Trinitrobenzene
- {EPA 8330} 2-Amino-4,6-dinitrotoluene
- {EPA 8330} 2-Nitrotoluene (ortho-Nitrotoluene)
- {EPA 8330} 2,4-Dinitrotoluene (2,4-DNT)
- {EPA 8330} 2,4,6-Trinitrotoluene (TNT)
- {EPA 8330} 2,6-Dinitrotoluene
- {EPA 8330} 3-Nitrotoluene (meta-Nitrotoluene)
- {EPA 8330} 4-Amino-2,6-dinitrotoluene
- {EPA 8330} 4-Nitrotoluene (para-Nitrotoluene)
- {EPA 8330} Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)
- {EPA 8330} Nitrobenzene
- {EPA 8330} Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)



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**\*\*TOTAL PETROLEUM HYDROCARBONS**

- {EPA 8015} DRO
- {EPA 8015} GRO

**End of Parameter List**