TMA
Thermo Analytical Inc.

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HANDLING FEES FOR LOW-LEVEL RADIOACTIVE MIXED SAMPLE MATERIALS

EAL Corporation is licensed by the State of California, an agreement State, to receive and handle radioactive materials (License No. 0023-07).

In addition to radionuclides, EAL performs analyses for a wide range of non-radioactive parameters on low-level waste samples. These include heavy metals, volatile and extractable organics, cyanide, TOC, solids content, asbestos, PCB's, EP Toxicity, fish bioassay and other tests.

Because of the special health physics requirements, EAL may require additional handling fees for the analysis of low level radioactive mixed samples.

PRICING & RESTRICTIONS

1. No Significant Activity

   a. Definition

      1. Any sample with GM survey meter surface reading not greater than background

      2. Any sample with less than 1% of activity shown in Table 1,

         or less than 10 dpm total alpha activity (excluding trans-uranics, which have lower limits),

         or less than 100 dpm combined beta/gamma activity,

         or less than 1,000 dpm tritium.

2. Low Level Activity

   a. Definition

      1. GM survey meter surface reading above background.

      2. Any sample with activity levels between 1-100% of values given in Table 1,

         or 10 to 1,000 dpm total alpha activity (excluding trans-uranics, which have lower limits),

or 100 to 10,000 dpm combined beta/gamma,

or 1,000 to 100,000 dpm tritium.

b. Standard prices plus 15% Radioactive Handling Surcharge.

c. Optional EAL sample screen (gross alpha, gross beta, and Ge/Li gamma scan) at current radiological service rates.

d. Radioactive materials determined to be high level will incur decontamination, monitoring and disposal fees as in item 3 below.

e. Without prior approval, EAL will accept no more than 1 kg of solid material or 4 liters of liquid in this category.

3. High Level Activity - Sample requiring Hot Lab preparation

a. Greater than Low Level Activity

b. Seventy per cent Hot Lab Preparation Surcharge ($200.00 minimum per lot).

c. High Level samples received in leaking or contaminated packing will incur decontamination, monitoring and disposal fees based on time ($50.00/hour) and materials.

d. Without prior approval, EAL will accept no more than 1 kg of solid material or 4 liters of liquid in this category.

e. There is a limit of 400 microcuries on the total sample. The dose rate of the sample should not exceed 200 mR/hr at the surface as measured with a properly calibrated ionization chamber detector. Alpha emitting transuranics should not be greater than 1.0 microcurie per sample.

The shipping manifest must include a list of the radionuclides and their approximate concentrations and the inorganic and organic chemical constituents. EAL reserves the right to return the sample residues to the client.

Please call EAL's Program Manager for Water and Soils Analysis for a more detailed discussion of your requirements.

Table 1.

Maximum Amounts of Activity to be Tested in an Uncontrolled Area

Nuclide	Radiation Type	Maximum Activity
Natural Th (a)	alpha, beta, gamma	500 dpm/aliquot
Natural U (a)	alpha, beta, gamma	600
Ra-226 (a)	alpha, gamma	1,000
Cs-137	beta, gamma	10,000
Co-60	beta, gamma	10,000
I-131	beta, gamma	10,000
Sr-90	beta	10,000
Pu-238	alpha	60
Pu-239	alpha	50
Pu-241	beta	2,000
Am-241	alpha	160
Am-243	alpha	160
Po-210	alpha, beta	1,000
Pb-210	alpha, beta	1,000
H-3	beta	100,000
C-14	beta	10,000
other beta, gamma		10,000
other alpha		on request
mixed activities		see formula below

(a) Value shown is for the parent only and assumes the presence of daughter activity.

Calculation of limits for mixed activities

For each nuclide of a mixed activity sample, divide the activity by the limit in Table 1. If the sum of these ratios for all nuclides is less than 1.0, then the sample is considered to be under the limit.

TMA Thermo Analytical Inc.

Pricelist

PROFESSIONAL
AND
ANALYTICAL SERVICES

EFFECTIVE NOVEMBER, 1986

Thermo Analytical Inc.

LABORATORIES & SERVICES

TMA/NORCAL
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TMA/EBERLINE
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Phone: (505) 345-9931

TMA/EBERLINE
Albuquerque Laboratory
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Albuquerque, New Mexico 87190
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TABLE OF CONTENTS

	Page No.
General Information	2
Laboratory/Field Service Labor Rates and Expenses	3
RCRA/CAM Hazardous Waste Characterization	4
RCRA Priority Pollutants	5
RCRA Ground Water Monitoring	5
Drinking Water Parameters	6
Sediments and Solid Sample Analyses	6
Wet Chemical Analyses	7-8
Bacteriological Analyses	8
Ion Chromatography	9
Microscopy/Particle Analysis	9
Radiochemical Analyses of Drinking Water	9
Metals Analysis	10
Gas Chromatography (Industrial Hygiene)	11
Gas Chromatography (Environmental)	12
Gas Chromatography/Mass Spectrometry	13
Organics - Fourier Transform Infrared Analysis	13
Organics - Ultraviolet/Visible Spectrophotometry	13
High Performance Liquid Chromatography	13-14
Infrared Analysis	14
Equipment Rental	15
Sampling Media and Sample Containers	15-16

GENERAL INFORMATION

TMA laboratories are approved by the state of California, Department of Health for analysis of hazardous waste and for complete chemical, bacteriological, radiological and biological analyses of drinking water. TMA is approved by other states, by state reciprocity, and approved by EPA for hazardous waste analysis under the Superfund Contract Laboratory Program. TMA laboratories are accredited by the American Industrial Hygiene Association.

This price list applies for routine testing; however some projects must be quoted individually due to the customized nature of our services. Prices for such projects depend upon the difficulty of sample preparation, method(s) employed for analysis, and field work involved. The following terms and conditions apply:

a. Minimum charge $150.00 ($50.00 for microscopy)
b. Requirements for proper sampling techniques and sample quantity vary depending upon the type of analysis that is needed. If you have questions regarding proper sample quantity, please contact us.
c. Provide a list of analyses for each sample submitted.
d. Unit prices are for batches of 2 to 5 samples. Single samples incur a 50% surcharge. Request quotation for batches of greater than 5 samples per shipment.
e. Package the sample carefully, observing requirements for refrigeration or addition of preservative, if necessary. Proper handling of samples prior to analysis is of utmost importance. Sampling containers with proper preservative, instructions, and refrigerated chests are available (see p. 15). If you have questions concerning sample preparation or handling requirements, contact us.
f. Samples containing levels of radioactivity that require hot lab screening incur a 15% surcharge. Samples requiring hot lab analysis incur a 70% surcharge.
g. Field portable instruments, sampling and pickup services are available at a nominal charge (See pages 3 and 15).
h. If other than normal sample preparation is required, there is an additional charge of $60.00 per hour (one hour minimum).
i. All samples received for analysis are received freight pre-paid. Rental equipment is FOB TMA facility.
j. Non-perishable samples will be held for 1 month after issuing the report unless we are requested to do otherwise. Fee for storage beyond 30 days is $20/sample/month for reasonable size samples.
k. Disposal of samples determined to be hazardous waste is the customer's responsibility and financial liability.
l. TMA usually provides rush handling of both environmental and occupational samples. Rush charges will be based on laboratory capacity, turnaround time requested and type of analysis.
m. TMA Routine Analysis - Analyses by GC & GC/MS will be conducted for EPA Hazardous Substance List (HSL) analytes. The TMA techniques employ purge & trap, extraction and concentration steps as required by the EPA methods. Quality Assurance includes instrument calibration and analysis of method blanks and QC check samples. For all GC/MS analyses and pesticide analysis by GC, precision and accuracy are determined in every sample using surrogates to simulate pollutant behavior.
n. Prices are subject to change without notice; 1/2 of 1% discount is available for payment within 10 days.

LABORATORY AND FIELD SERVICES LABOR RATES AND EXPENSES*	Rate per Hour
Consultation/non-routine analytical labor- Scheduled	
Senior Professional Staff (regular/overtime)	$ 85.00/110.00
Certified Industrial Hygienist (regular/overtime)	95.00/125.00
Chemist/Biologist/Industrial Hygienist (regular/overtime)	75.00/100.00
Technician (regular/overtime)	60.00/80.00
Court Testimony and Deposition (4 hour minimum)	
Senior Professional Staff	135.00
Certified Industrial Hygienist	160.00
Chemist/Biologist/Industrial Hygienist	120.00
Technician	90.00
Emergency Services - Unscheduled**	
Professional	130.00
Technician	95.00
Guard	50.00
Travel Expenses	
Company Automobile	0.35 per mile
Mobile Laboratory	1.16 per mile
Rental Vehicles	(cost plus mark-up)
Other Expenses	(cost plus mark-up)
Mobile Laboratory on-site	116.00 per hour

*Labor and travel costs are based on travel from point of deployment. Four (4) hour minimum charge for any field work.

**Unscheduled emergency services will be charged for time spent in the laboratory with a four (4) hour minimum. Work force will include a guard and a technician or professional. In addition, analyses performed will be subject to a 200% rapid turnaround premium.

ENVIRONMENTAL, OCCUPATIONAL SAFETY AND HEALTH SERVICES

RCRA/CAM HAZARDOUS WASTE CHARACTERIZATION

	Unit Price
Ignitability	
flashpoint of liquids (Pensky-Martens Closed Cup)	$29
ignitability of solids	43
ignitability screen	19
Corrosivity	
steel corrosion (NACE)	242
pH of aqueous samples	9 - item 2
Reactivity	
test for reaction with water or dilute acid or alkali	19
thermal instability	63
impact test (Bureau of Explosives)	(Price on request)
Cyanide screen	19
Sulfide screen	19
Toxicity	
Extractions	
EPA-TCLP (F.R. V51, No.114)*	140
EPA-TCLP w/ Zero Headspace Extraction (F.R. V51, No.114)*	210
EPA-EP (Fed.Reg.Vol.45, No.98,EPA SW-846 No.1310)*	140 - item 3
California State Extraction Procedure (WET) 48-hour*	130
California CAM Metals (17) in Solids (TTLC): Hg by CVAA; Ag,As,Ba,Be,Cd,Cr,Co,Cu,Pb,Mo,Ni,Sb,Se,Tl,V,Zn by ICP	188
Structural Integrity	57
Asbestos, solids	75
Analysis of Extractants	
California CAM Metals(17) (STLC): Hg by CVAA; As/Se by AA; Ag,Ba,Be,Cd,Cr,Co,Cu,Pb,Mo,Ni,Sb,Tl,V,Zn by ICP	239
EPA EP Metals(8): Hg by CVAA; As/Se by AA; Ag,Ba,Cd,Cr,Pb by ICP	204 - item 3
Chromium, hexavalent	37
Fluoride (direct SIE)	29
Pesticide Residues & Chlorophenoxy herbicides	375
GC/MS screen of extract (organics)	(See GC/MS Section)
Additional Parameters	
vapor pressure (Reid)	40
viscosity (Saybolt)	32
heating value (BTU)	(Price on request)
bioaccumulation potential (HPLC)	(Price on request)
Emergency Analytical Services	
mobile laboratory and 24-hour staff available for identification of spills, etc.	(Price on request)

*Price is for samples ready to extract. Sample preparation charges are additional.

RCRA PRIORITY POLLUTANTS	Unit Price Water	Unit Price Solid
Organics - Routine Methods*		
Organochlorine Pesticides & PCB's	$185	$235[1]
Volatile Compounds - GC/MS	275	300
Semivolatile (Acid Base/Neutral) Compounds - GC/MS	470	570[1] — item 4 GC/MS 85% of price
Organics - CLP Protocol**		
Organochlorine Pesticides and PCB's	220	280
Volatile Compounds - GC/MS	370	420
Semivolatile (Acid Base/Neutral) Compounds - GC/MS	675	760
Metals (13):Moisture,Hg by CVAA;As/Se by AA Ag,Be,Cd,Cr,Cu,Ni,Pb, Sb,Tl,Zn by ICP	234	252
Cyanide (EPA Method 335.2)	45	45
Phenolics (EPA Method 420.1)	42	54
Asbestos (EPA Methods TEM, PLM)	420	75

RCRA GROUND WATER MONITORING - CFR 40, 265.92b	Water
Interim Primary Drinking Water Standards -	
Inorganic Chemicals - As,Se,Hg,Ag,Ba,Cd,Cr,Pb,F,NO_3	277
Organic Chemical - endrin, lindane, methoxychlor, toxaphene, 2,4,5-TP (Silvex), 2,4-D	375
Radiochemical - gross alpha, gross beta, total radium	119
Bacteriological - coliform bacteria	22
TOTAL	793
Water Quality Parameters -	
chloride, phenol, sulfate, Fe, Mn, Na	151
Contamination Indicators - (quadruplicate analysis)	
pH, specific conductance, total organic carbon, & total organic halogen	360

[1]Includes Gel Permeation Chromatography (GPC) cleanup.

*See General Information section for definition of TMA Routine Methodology

**Reported without CLP data package. Add 15% for CLP data package.

ENVIRONMENTAL, OCCUPATIONAL SAFETY AND HEALTH SERVICES

Item No

	Unit Price
DRINKING WATER PARAMETERS	
Safe Drinking Water Act (SDWA)	
Inorganic Chemical - As,Se,Hg,Ag,Ba,Cd,Cr,Pb,F,NO_3	$277
Organic Chemical - endrin, lindane, methoxychlor, toxaphene, 2,4,5-TP (Silvex), 2,4-D	375
Radiochemical - gross alpha, gross beta, total radium	119
Bacteriological - coliform bacteria	22
General Physical - turbidity	13
Trihalomethanes	110
Subtotal	916
Additional Tests Required by California Title 22	
General Mineral - Ca,Cu,Fe,Mg,Mn,Na,Zn,alkalinity, chloride,surfactants,pH,sulfate,specific conductance,total dissolved solids, total hardness	271
General Physical - odor, color	47
TOTAL	1234
SEDIMENT & SOLIDS ANALYSES	
Alkalinity (Carbonate/Bicarbonate/Hydroxide) as $CaCO_3$	25
Biochemical Oxygen Demand (BOD)	51
Cation Exchange Capacity	35
Chemical Oxygen Demand (COD)	48
Chloride (w/ aqueous extraction)	25
Chromium, hexavalent	39
Coliform Bacteria, total	78
5 Cyanide	45
Dry, Grind & Sieve*	14
Elutriate preparation	144
Exchangeable Na	35
Exchangeable Na,K,Ca & Mg	144
Fluoride (w/distillation)	48
Mixing/Compositing, 3 samples into 1	12
Moisture	12
Nitrate	40
Oil and Grease - Soxhlet/gravimetric	67
Organic Halogen, Total	75
Particle Size Distribution	
Sieve (50um-2mm)	37
Sieve-hydrometer (2um-2mm)	97
Petroleum Hydrocarbons - Infrared	74
pH	10 Item 2 solid
Phenol	54
Phosphate	42
Saturation Percentage	13
Sodium Absorption Ratio	57
Specific Conductance (1:1 Ratio soil/water)	15
Sulfate	37
Sulfide w/ distillation	51
Sampling and analysis of dredge materials	(Price on request)

*Maximum 500g sample, #10 sieve.

WET CHEMICAL ANALYSES

	Unit Price
Acids (Impinger Solutions/Filters)	
Chromic (NIOSH P&CAM 319) PVC Filters	$ 41
Hydrochloric (NIOSH S246) Impinger	35
Hydrofluoric (NIOSH S176) Impinger	35
Nitric Filter	41
Phosphoric (NIOSH P&CAM 216) Filter	41
Sulfuric (NIOSH P&CAM 187) Impinger	35
(Also see Ion Chromatography Section, p. 9)	
Acidity as $CaCO_3$	18
Alkalinity (Carbonate/Bicarbonate/Hydroxide) as $CaCO_3$	18
Arsine (NIOSH S229)	48
Biochemical Oxygen Demand (5-day BOD)	51
Boron	
Carminic	24
Curcumin	25
Bromide	29
Carbon, Total Organic (TOC)	37 – Plan 5 Tue
Chloride	16
Chlorine (NIOSH 209)	33
Chlorine (residual)	33
Chromium, hexavalent (water) 24-hour TAT	37
Chemical Oxygen Demand (COD)	26
Color	12
Corrosivity (Langlier Index)	59
Cyanide (Distillation)	45
Cyanide (SIE, NIOSH S288)	35
Cyanide amenable to chlorination (total & amenable)	97
Fluoride (Total gaseous and particulate, NIOSH 212)	59
Fluoride (Direct SIE)	29
Fluoride (Distillation/SIE)	48
Formaldehyde (NIOSH P&CAM 125)	39
Hardness as $CaCO_3$	16
Hydrogen Sulfide (NIOSH S4)	35
Hydroquinone (colorimetric)	59
Iodide	41
Isocyanates MDI/TDI (NIOSH P&CAM 142/141)	41
Nitrogen	
Ammonia (NIOSH P&CAM 205)	42 – Plan 5
Nitrate	25
Nitrite	17
Nitrate/Nitrite	29
Organic	54
Total Kjeldahl	48
Nitrogen Oxides (Adsorption Tube, NIOSH S321)	48
Odor	35
Oil and Grease (gravimetric)	42
Oil and Grease (infrared)	49
Oil and Grease including petroleum hydrocarbons (gravimetric)	60

ENVIRONMENTAL, OCCUPATIONAL SAFETY AND HEALTH SERVICES

WET CHEMICAL ANALYSIS (Continued)

	Unit Price
Oxygen, dissolved (SIE)	$13
Ozone (NIOSH)	43
Perchlorate	24
Petroleum Hydrocarbons (infrared)	59
pH	9
Phenols (water samples)	42
Phosphate - Hydrolyzable	21
Phosphate - Ortho	21
Phosphate - Total	26
Phosphine (NIOSH S332)	51
Silica, Molybdate reactive	21
Sodium Hydroxide (filter-total sodium)	40
Sodium Hydroxide (impinger) (NIOSH P&CAM 241)	65
Sodium Hydroxide (filter) (NIOSH S381)	72
Solids/Residues	
Dissolved (Filterable)	23
Suspended	17
Total	15
Volatile	25
Settleable	16
Specific Conductance	8
Specific Gravity (Hydrometer)	9
Sulfate	24
Sulfide (Methylene Blue, NIOSH S4)	30
Sulfide (Iodometric Titration)	30
Sulfite	30
Sulfur Dioxide (NIOSH S308)	42
Surfactants - MBAS	40
5 - Total Organic Carbon (TOC)*	37 - 37 - quote - why
Total Organic Halogen	63
Turbidity	13

BACTERIOLOGICAL ANALYSES

Adenosine triphosphate (ATP), $150 minimum	78
Algal Pigments (chlorophyll/pheophytin)	24
Coliform, total and fecal-serial dilution	78
Coliform, total-five 10 mL tubes	22
Coliform, total, 3 dilutions, 5 tubes/dilution	60
Standard plate count, per plate	24

*Add 100% for quadruplicate analysis.

ION CHROMATOGRAPHY ($Cl, SO_4, NO_2/NO_3, F$, Ortho PO_4, Br)	Unit Price
Sample Preparation	
Silica gel tube desorption, front & back	$ 18
Filtration, 022 um	(included below)
Analysis	
Single ion	50
Two ions	66
Three ions	71
Four ions	76
Five ions	81

Amount 1st 35 not on

MICROSCOPY

Asbestos	
Phase Contrast Microscopy (filters, NIOSH P&CAM 239 or 7400)	30
Polarized Light Microscopy (bulk samples)	35
(soil, "point count")	75
X-ray Diffraction (bulk samples)	69
Transmission Electron Microscopy (water and air)	420
(soils)	450
Photomicrographs	37
Gravimetric Analysis (filter)	12
Crystalline Silica (X-ray Diffraction, NIOSH P&CAM 259)	
bulk	57
filter	64
filter (including gravimetric)	75
Particle Size Distribution (Optical Microscopy)	98

RADIOCHEMICAL ANALYSIS OF DRINKING WATER

Gross Alpha and Gross Beta	52
Gross Alpha or Gross Beta	40
Gamma, Isotopic (Ge/Li)	131
Tritium w/ distillation	89
Strontium-90	85
Radium 226	79
Radium 228	126
Total Radium	67
Uranium, Isotopic	138
Uranium, Fluorometric	23
Radon 222	65

ENVIRONMENTAL, OCCUPATIONAL SAFETY AND HEALTH SERVICES

METALS ANALYSES

SAMPLE PRETREATMENT (All Samples Require Pretreatment):	Unit Price Water	Unit Price Solid
Dry, grind & sieve (max. 500g sample, #10 sieve)	--	$ 14
Filtration	$ 12	--
Mineral acid digestion	19	23
Reflux acid digestion	--	44
Mercury digestion	23	23
Arsenic/selenium digestion	23	23
Silver digestion	19	23
Screen and matrix adjustment (Na,K,Ca,or Mg by AA)	8	8
Chelation/Solvent Extraction	32	50

Industrial Hygiene Samples:	Unit Price
Acid digestion (NIOSH 173) soluble Cr(S-323),Se(S-190)	21
Mixed acid digestion for As (309) Be(S-339), Ca(S-205), insoluble Cr(S-352), Mo(S-376), Ni(S-206), Pt(S-191), Sb(261), Sn(S-183), Ti(S-385), Zr(S-185)	23
Aqueous extraction for Ba(S-198), V_2O_5(S-388)	21
Digestion for soluble and insoluble Tungsten (P&CAM 271)	38
Perchloric acid digestion for PVC filters	24

SPECTROSCOPIC ANALYSES: Does not include sample preparation	Unit Price Per Scan
Inductively Coupled Plasma Atomic Emission (ICPAE)	
UV Full Scan (23 elements): Ag,Al,As,Ba,Be,Ca,Cd,Co,Cr,Cu,Fe Mg,Mn,Mo,Ni,Pb,Sb,Se,Sr,Sn,Tl,V,Zn	140
CAM Metals (16 elements): Ag,As*,Ba,Be,Cd,Cr,Co,Cu,Mo,Ni,Pb,Sb,Se*,Tl,V,Zn	110
Priority Pollutant Metals (12 elements): Ag,As*,Be,Cd,Cr,Cu,Ni,Pb,Sb,Se*,Tl,Zn	105
EP Toxicity Metals (7 elements): Ag,As*,Ba,Cd,Cr,Pb,Se*	75
Alkali Metal Scan: Na,K,Li	65
Non-routine analysis	$75 per hour

Atomic Absorption (AA)** - 41 elements: Ag,Al,As,Au,Ba, Be,Bi,Ca,Cd,Co,Cr,Cs,Cu,Fe,Ga,Hg,In,K,La,Li,Mg,Mn,Mo, Na,Ni,P,Pb,Pt,Rb,Sb,Se,Sm,Sn,Sr,Te,Ti,Tl,V,W,Zn,Zr	Unit Price Per Element
Flame Atomic Absorption	$14
Heated graphite furnace AA	23
Cold Vapor Atomic Absorption (Hg)	18
Hydride Generation Atomic Absorption (As,Se)	21

*As/Se for screening purposes only.
**Add 100% for instrumental analysis by Method of Standard Additions.

ORGANICS - GAS CHROMATOGRAPHY

Industrial Hygiene Samples	Unit Price
Acids (volatile organic)	$ 48
Acrylonitrile	48
Alcohols	48
Aldehydes	48
Aliphatics, common solvents (e.g. hexane,octane,pentane)	48
Amines	48
Anesthetic gas	48
Aromatics, common solvents (e.g. benzene,toluene,xylene)	48
Chlorinated Pesticides	77
Esters	
Ethyl acetate; n-butyl acetate; Secondary butyl acetate; Tertiary butyl acetate	48
Ethylene dibromide (EDB)	74
Halogenated Volatile Organics	48
Inorganic Gases (e.g. CO_2, O_2, N_2)	69
Phenols (Impinger Solutions, NIOSH S-330)	69

(1) Prices are for 2-section sorbent tube or OVM unless otherwise stated.
(2) Unless otherwise indicated, prices cover one compound. For quantifications beyond one compound, add 25% per additional compound on same run. Please call to confirm compatibility of multiple analytes.

ORGANICS - GAS CHROMATOGRAPHY (Continued)	Unit Price Water	Unit Price Soil
Environmental Samples		
Aromatic Volatile Organics		
(Routine Analysis for Method 602 analytes)*	$ 115	--
(Routine Analysis for Method 8020 analytes)*	--	$ 140
Chlorinated Phenols		
Pentachlorophenol; Tetrachlorophenol isomers; Trichlorophenol isomers	110	135
Chlorinated Pesticides and PCB's		
(Routine Analysis for Method 608 analytes)*	185	--
(Routine Analysis for Method 8080 analytes)*	--	235[1]
CLP Protocol**	220	280
Ethylene Dibromide (EDB)	99	125
Gasoline/Fuel mixtures***		
Fingerprint compared with bulk standard	120	145
Total Petroleum Fuel Hydrocarbons (RWQCB)	110	135
Total Petroleum Hydrocarbons (RWQCB)	150	175
Total Petroleum Fuel Hydrocarbons, including BTX	155	180
Halogenated Volatile Organics		
(Routine Analysis for Method 601 analytes)*	115	--
(Routine Analysis for Method 8010 analytes)*	--	140
Combination - Volatile Aromatics + Halogenated Hydrocarbons		
(Routine Analysis for 601 and 602 analytes)*	200	--
(Routine Analysis for 8010 and 8020 analytes)*	--	250
Organophosphorus Pesticides		
Dimethoate; Malathion; Methyl Parathion; Parathion water (Routine Analysis for Method 614 analytes)*	175	200
Phenoxy Herbicides		
(Routine Analysis for Method 615 analytes)*	190	--
(Routine Analysis for Method 8150 analytes)*	--	215
Polychlorinated Biphenyls (PCB's)***		
(See Chlorinated Pesticides listing above for water and soil)		
oil	80	
Total Hydrocarbon scan (Qualitative identification only)	75	100
Trihalomethanes (Routine Analysis for Method 501 analytes)*		
Quantification for up to 4 compounds in water	110	--

[1] Includes Gel Permeation Chromatography (GPC) clean up.
*See general information section for description of TMA routine analysis.
**Reported without CLP data package. Add 15% for CLP data package.
***Volume discounts are available for these analyses.

ORGANICS - GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)

	Unit Price Water	Unit Price Solid
Volatile Compounds (Routine Methods)*	$ 275	$ 300
Semivolatile (Acid & Base/Neutral) Compounds (Routine Method)*	470	570[1]
Volatile Compounds (CLP Protocol)**	370	420
Acid & Base/Neutral Compounds (CLP Protocol)**	675	760[1]
Identification of Non-Hazardous Substance List Compounds (up to 10 largest peaks in any fraction)	50	
Non-Routine analysis	300/hour	
Organics on sorbent tubes	(Price on request)	

ORGANICS - FOURIER TRANSFORM INFRARED ANALYSIS

Qualitative Scan w/o Interpretation	90
Qualitative Scan w/ Interpretation & Quantitation	170/hr.
Neat Liquids (as received)	90
KBR Pellets for solids or mulls	100
Pyrolyzed Solids	120
Attenuated Total Reflectance (ATR's)	140
Confirmation of known spectra	70
Special FTIR Analyses	300
Trace Contaminants in Gas	200/component

ORGANICS - ULTRAVIOLET/VISIBLE SPECTROPHOTOMETRY

UV - Vis Scan	60
UV Transmission	40
Optical Neutrality	60
Neutrality and Chromaticity	150

HIGH PERFORMANCE LIQUID CHROMATOGRAPHY

Single Component Analysis	180
Polynuclear Aromatic Hydrocarbons	
In ground water & waste (EPA 8310)	150
In solid waste (EPA 8320)	200
Nitroaromatics (EPA 609 - Methane Modified)	150
Pesticides	
Organophosphates	150
Carbamates	150

[1]Includes Gel Permeation Chromatography (GPC) Clean up.
*See general information section for description of TMA routine analysis.
**Reported without CLP data package. Add 15% for CLP data package.

HIGH PERFORMANCE LIQUID CHROMATOGRAPY

Agricultural Pesticides & Herbicides (NIOSH Methods):	Price
5001 2,4-D, 2,4,5-TP	
5002 Wafaran	
5003 Paraquat	
5004 Hydroquinone	Call for quote
5005 Thirim	
5007 Rotenone	

Method 5009

benzyl peroxide	$ 150
bromoxynil & bromoxynil octoate	150
dyes, such as o-toluidine	150
cyanates (R.C.N.)	150

INFRARED ANALYSIS (NIOSH Methods):

6600 (long path cell)	100
7602 silica (respiratory KBR)	100

EQUIPMENT RENTAL

Additional survey equipment available upon request. Replacement or repair of damaged or lost equipment will be charged at cost plus 30%.

	Price
Alnor velometer	$ 24.00/day
Audio dosimeter (DuPont Mark I)	75.00/week
Carbon Monoxide Analyzer (Interscan)	35.00/day*
Combustible gas/oxygen meter (Gastech)	35.00/day*
Detector tube pumps (hand pumps, Bendix, Drager, MSA)	30.00/week
Dissolved oxygen meter	91.00/week
Filtration apparatus (filter holder, filter flask, filters)	19.00/day
High volume samplers	48.00/week
Midget impingers	12.00/week
MSA Cyclones	12.00/week
Personal sampling pumps (MSA, Sipin)	43.00/week
pH Meter, analog	30.00/day
Portable Strip Chart Recorder (Linear)	23.00/day
Sediment sampler-ponar 9" x 9"	43.00/day
Sound level meter (Gen Rad 1565B)	91.00/week
Specific conductance meter	35.00/day
Spectrophotometer	145.00/day
Vacuum pump	30.00/day
Water Sampler (5L Niskin)	29.00/day
Well Pump (ISCO 2600 Bladder Pump) (add $20/gas cylinder required)	87.00/day*
Well Sampler, teflon bailer	23.00/day
Well sampler - 600 mL. Kemmerer	23.00/day

SAMPLING MEDIA AND SAMPLE CONTAINERS

Customized kit with 10 containers or less, blue ice, labels, preservatives & instructions (does not include freight)	50.00
Miscellaneous sorbent tubes	6.00
Sorbent tubes for NO/NO_2	4.00
Charcoal tubes, jumbo	4.00
Charcoal tubes, regular	3.00
Silica gel tubes	4.00
OVM Badges	10.00
Untared membrane filters in Millipore field cassettes (37mm)	
Mixed Cellulose Ester (0.8 um)	5.00
PVC (5 um or 0.5 um)	5.00
Selas silver (0.8 um or 0.45 um)	10.00

*Minimum rental charge $110.00.

SAMPLING MEDIA AND SAMPLE CONTAINERS (Continued)

	Price
Tare-weighed membrane filters in Millipore field cassettes	
Mixed Cellulose Ester (0.8 um)	$ 6.00
MSA PVC (5 um)	6.00
Selas silver (0.8 um or 0.45 um)	11.00
Gas Sampling bags rental, including background analysis by GC. Sturdy 5-layer, non-permeable gas sampling bag with on/off valve/hose barb combination and septum (5-liter size)	57.00
Gas Sampling bag rental, without background analysis (2-week time limit)	18.00
Impinger solutions, preparations	23.00
1/2-gallon glass bottles for organic chemical analysis	7.00
1-gallon glass bottles for organic chemical analysis	8.00
5-gallon cubitainer	8.00
Volatile organics vials (40 mL)	4.00
Other glass bottles (as available)	4.00