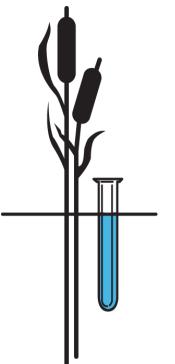
# Aquatic Consulting & Testing, Inc.

# Statement of Qualifications and Fee Schedule





# Aquatic Consulting & Testing, Inc

1525 W. University Drive, Suite 106Tempe, Arizona 85281Telephone:(480) 921-8044Fax:(480) 921-0049E-mail:Iab@aquaticconsulting.comWeb address:www.aquaticconsulting.com

# HISTORY

Aquatic Consulting & Testing, Inc. (AC&T) is a small, woman-owned business incorporated in 1988. Start-up services included environmental microbiological and limited inorganic analysis, and consulting services to municipalities and engineering firms.

Expansion by acquiring an independent environmental laboratory in 1994 allowed AC&T to provide expertise in full-service inorganic analysis, as well as aquatic biology and limnology. The office has been located in the DeMuro Corporate Square, conveniently located between ASU and Phoenix Sky Harbor Airport, throughout its course of operation.

# ABOUT US

The staff is composed of 12 biologists, chemists and environmental scientists, and 2 support personnel. The owners, Elizabeth (Beth) Atkinson and Frederick (Rick) Amalfi, Ph.D., have been involved in day-to-day operation of AC&T since its inception.

AC&T is certified by the Arizona Dept. of Health Services (ADHS), Office of Laboratory Licensure, for analysis of multiple parameters. OPM (Office of Pest Management)-licensed aquatic pesticide applicators and a NALMS-certified lake manager are on staff for surface water chemical applications and management.

# AQUATIC CONSULTING & TESTING, INC. STATEMENT OF QUALIFICATIONS

# **Biological and Analytical Chemistry Services**

#### Laboratory Location:

The office and laboratories are located just west of the University and Priest intersection in Tempe, Arizona:

1525 W. University Drive, Suite 106 Tempe, Arizona 85281 Telephone: 480-921-8044 Fax: 480-921-0049 Email: <u>lab@aquaticconsulting.com</u> Website: www.aquaticconsulting.com

#### Laboratory Turnaround Time

15-day turnaround time is generally offered. RUSH turnaround analysis can be provided in addition to weekend and holiday rates. The following surcharges apply:

<u>Requirement</u>	<u>Charge</u>
24 Hour	3X base rate
48-72 Hour	2X base rate
3-5 Day	1.5X base rate
5-10 Day Weekend/Holiday*	Standard, available based on laboratory workload 3X base rate

\* Samples requiring immediate attention (short holding times or special lab preparation) and received after 3:00pm on a Friday may be subject to Weekend/Holiday surcharge. Contact the lab if sample must be submitted on Friday afternoon.

#### **Supplies and Volume Discounts**

Clients are provided with clean, pre-preserved sample bottles, coolers, blue ice and chain of custody. Volume discounts may be applicable.

#### Invoices & Payment

Payment is due thirty (30) days from invoice date. A finance charge of 1% per month may be added to any balance unpaid after the 30 days.

#### **Description of Services:**

#### 1.0 General Statement

AC&T has been providing aquatic consulting and analytical testing for over two decades. Collectively, staff members have over a hundred years of environmental consulting and analytical testing experience. Services provided include:

- Environmental Water Quality Consulting
- Lake, Pond and Reservoir Management
- Field Sampling
- Environmental Data Evaluation & Validation
- Vector Monitoring and Management
- Biological Identification
- Biotoxicity Assays
- WET Testing
- Environmental Analysis

#### 2.0 Environmental Water Quality Consulting

AC&T performs analytical testing for water quality compliance programs such as industrial pretreatment permits, NPDES/AZPDES permits, Aquifer Protection permits, and source water quality monitoring for drinking water. Assistance is available for coordination of monitoring programs, completion of required permit applications, monitoring reports, and corrective actions for compliance with regulations. Certified water and wastewater operators are available for assistance with domestic water treatment problems. On-site operation and maintenance of in-line treatment systems or on site-laboratories are also available.

- Safe Drinking Water Act
  - Compliance sampling, testing, reporting
- Clean Water Act NPDES/ AZPDES
  - Regulatory assistance
  - Stormwater monitoring and compliance reporting
  - Field sampling
  - Analytical testing

- Pretreatment Discharge Compliance
  - Regulatory assistance
  - Field sampling
  - Analytical testing and reporting
- Municipal Treatment
  - Process consulting
  - Microbiology
  - AZPDES/NPDES compliance
  - Effluent water quality monitoring

#### 3.0 Lake and Reservoir Management

Vice-President and co-owner, Dr. Frederick A. Amalfi, developed his doctoral thesis on lakes in Arizona, and has provided consulting services to many city, county, state and federal agencies with regard to lake management and reservoir water quality management. Dr. Amalfi has also consulted internationally on large reservoir management, most notably at Lake Baikal, in Siberia.

Consulting services provided in our surface water management include:

- Regulatory Compliance
  - Aquifer protection
  - Stormwater runoff
  - Fish consumption and full body contact water quality compliance
  - Compliance sampling, testing and reporting
- Insect, Algae and Aquatic Weed Management
  - Certified NALMS & AZ OPM (Office of Pest Management
  - Morphometric measurements
  - Chlorophyll a,b,c / pheophytin
  - Management plans
- Fisheries Management
  - Regulatory assistance
  - Analytical testing and reporting
- Water Quality Measurement
  - Temperature / oxygen Profiles
  - Trophic status
  - Siltation rates
  - Nutrient budgets
  - Water quality analyses
  - Reclaimed water feasibility
  - Microbiology

#### 4.0 Field Sampling

Field sampling and analytical testing supports most of our consulting services:

Discrete sampling

- 24 Hour flow weighted composite sampling
- Stormwater
- Groundwater
- Surface water
- Source/drinking water
- Sediment
- Soil
- Hazardous waste

#### 5.0 Environmental Data Evaluation and Validation

Our staff has decades of direct experience analyzing, reviewing, and reporting environmental analytical data. Full service validation, reporting, recommendations, and professional expert witness testimony are offered.

#### 6.0 Vector Monitoring and Management

Organisms of concern in Arizona include midge flies and mosquitoes. AC&T conducts ongoing collection and monitoring of adult and larval mosquitoes and midge flies for our clients, and in cooperation with Maricopa County Health Department (MCHD) and the Arizona Department of Health Services (ADHS) provides a warning system for any vector issues arising from wetland vegetation and water quality. Our resident limnologists and entomologists provide aquatic insect monitoring and mitigation for aesthetic, quality of life, and human health protection. Although most species of midge flies do not bite, they tend to swarm in the early evening, interfering with human recreational activities. Mosquitoes, on the other hand, can be mild to aggressive biters, causing minor skin irritations to severe diseases in humans and domesticated animals.

AC&T provides live trapping of adult mosquitoes using carbon-dioxide traps. These traps, consisting of carbon dioxide and light sources, electric-operated intake fan, and capture net, are placed in the field during the late afternoon. The traps are picked up in the morning and the adult mosquitoes are quick-frozen for subsequent enumeration and identification. Identification is important to assess the origin of the mosquitoes and relative risk of vector-borne disease in the trap area. Counts are necessary for estimating population changes and efficacy of control measures. Manual dipping, counting, and species identification of mosquito larvae also helps identify breeding sites.

Midge flies are collected in the evening using New Jersey Light Traps. The traps are similar to those used for mosquitoes, but depend on a much stronger light source and collection fan. Remote operated dredges collect larval midges. Larvae most often live in organically rich sediments of irrigation channels or lakes and ponds. The larvae are separated from the mud by floatation and densities are determined per square meter of lake or channel bottom. Management strategies usually involve biologically limiting the number of larvae in the sediment, and water quality management to reduce

production of organic matter in the water. AC&T provides integrated pest management plans for controlling undesirable aquatic organisms.

Case-specific management strategies are developed which incorporate public education, habitat manipulation, biological controls and chemical treatment. OPM-licensed and certified aquatic pesticide applicators are on staff for any required chemical treatment.

#### 7.0 Biological Identification

Staff biologists, entomologists, and environmental scientists can identify the species necessary for formulation of management plans. We can characterize the algae, submerged and emergent aquatic plants, zooplankton, insects and other invertebrates that comprise the biotic community.

#### 8.0 Biotoxicity Assays

AC&T can provide several biological monitoring and evaluation techniques for investigative and effluent discharge compliance requirements. Algal growth potential (AGPT) or algal biostimulation tests may be performed to determine the nutrient status of surface water and its response to changes in environmental conditions. Short term static or renewal, acute and chronic toxicity tests using EPA protocols are utilized for identification of potentially biohazardous discharge or waste load allocation for receiving waters. Sediment toxicity tests are available for assessing potential adverse effects of accumulated or solids-related contaminants on benthic organisms. Changes in algal composition and abundance, aquatic insect composition, and periphyton composition are determined to assess suspected stream and river pollution using USEPA Rapid Bioassessment Protocol (RPB).

#### 9.0 WET Testing

AC&T is certified by the Arizona Dept. of Health Services (ADHS), Office of Laboratory Licensure, for analysis of multiple parameters including freshwater acute and chronic toxicity tests.

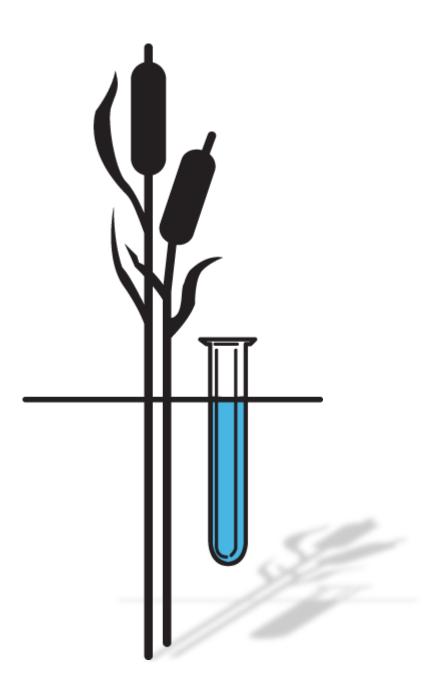
The WET testing section of our laboratory occupies over 1200 square feet and is physically separated from other testing areas to eliminate cross contamination. The WET laboratory is environmentally controlled and equipped with dedicated growth chambers and instruments. Invertebrate and algal cultures are maintained in-house; vertebrates are purchased exclusively from the same supplier since 1989.

Quality control is maintained by extensive documentation and monthly reference toxicant analysis. Acceptability of greater than 99% has been achieved in 22 annual DMRQA proficiency studies.

#### **10.0** Environmental Analysis

AC&T is a state-licensed environmental laboratory. Many chemical analyses are provided for compliance with city, state, and federal drinking water standards, aquifer protection permits, and wastewater NPDES/AZPDES permits. Constituents analyzed include forms of chlorine, nitrogen and phosphorous, solids, metals, biochemical oxygen demand, anions, and total organic carbon.

Specialized soil testing is available for contaminant identification, toxicity assessments, and bioremediation support. Chemical testing and sampling for NPDES/AZPDES industrial and municipal storm water runoff permits are available. AC&T also provides process and surface water contaminant identification using ICP, SEM/EDS, and a variety of microscopic examinations.



### MICROBIOLOGY

Analysis		<u>Cost / Sample</u>	
	<u>Method</u>	<u>Water</u>	<u>Soil</u>
Total Coliform			
P/A	SM9221E	\$ 25.00	n/a
Colilert	SM9221B	\$ 25.00	\$ 50.00
Colilert (24 hr RUSH - Escrow)	SM9221B	\$ 50.00	n/a
Fecal Coliform			
MPN (15 tube/3 dilution series)	SM9221C	\$ 25.00	\$ 50.00
Each additional dilution		\$ 20.00	\$ 20.00
Membrane Filter	SM9221D	\$ 25.00	n/a
Biosolids	SM9221C	n/a	\$50.00
E. coli			
Colilert (P/A)	SM9223B	\$25.00	n/a
Membrane Filter	SM9221C	\$25.00	n/a
Fecal streptococcus			
MPN (15 tube/3 dilution series) – (1,600)	SM9230B	\$ 45.00	\$ 75.00
Each additional dilution		\$ 20.00	\$ 20.00
Membrane Filter	SM9221D	\$ 45.00	n/a
Heterotrophic Plate Count (HPC)	SM9215B	\$ 50.00	\$ 75.00
Iron Bacteria (P/A Reactivity)	SM9240B	\$ 60.00	\$ 100.00
Sulfur Bacteria (P/A Reactivity)	SM9240C	\$ 60.00	\$ 100.00
Botulism Toxin Screening		\$ 75.00	
Denitrifying Bacteria		\$ 60.00	
Nitrifying Bacteria		\$ 60.00	
Slime Forming Bacteria		\$ 60.00	
Pseudomonas Screen		\$ 50.00	
<i>E. coli</i> Type H0157:H7		\$ 60.00	
Bacteria Species Identification (BIOLOG)	\$ 75.00 cultur	e + \$90.00 per	colony type
Yeast & Mold Count		\$ 75.00	
Fungus (Genus identification)		\$ 75.00	
Coliphage		\$ 150.00	
Mutagenicity (AMES test)		Quote	
AMES Test		\$ 2800.00	
Salmonella		\$ 45.00	\$ 150.00
Aeromonas Screen		\$50.00	\$50.00
Anaerobic Bacteria Count		\$50.00	\$50.00

#### **BIOLOGY CONSULTING**

Consultation and Special Analyses	<u>Cost / Hour</u>
Research and Developments – Special Projects	
Senior Microbiologist	\$ 125.00 *
Senior Biologist	\$ 125.00 *
Microbiology Technician	\$ 75.00 *
Clerical	\$ 45.00 *
*minimum fee	

# **BIOMONITORING / BIOTOXICITY**

		Cost / Sample	
	Number of replicates		
Acute Toxicity Test (EPA Method 821-R-02-012)	2	4	5
100% vs Control (Daphnia magna/pulex, Ceriodaph	nia dubia, or Pimepho	ıles promelas)	
24-hr static test	\$ 150.00	\$ 200.00	\$ 250.00
48-hr static test or renewal test	\$ 175.00	\$ 225.00	\$ 300.00
96-hr static test or renewal test	\$ 300.00	\$ 400.00	\$ 450.00
Five dilution series (Daphnia magna/pulex, Cerioda	phnia dubia, or Pimer	ohales promelas)	
24-hr static test	\$ 400.00	\$ 400.00	\$ 450.00
48-hr static test or renewal test	\$ 450.00	\$ 550.00	\$ 650.00
96-hr static test or renewal test	\$ 550.00	\$ 750.00	\$ 850.00
		C	Cost / Sample
			-
Chronic Toxicity Test (EPA Method 821-R-02-013)			
Cladoceran (C. dubia) survival & reproduction [U	SEPA 1002.0]		
100% vs control (10 reps)			\$ 800.00
Five dilution series (10 reps)			\$ 1150.00
Fathead minnow (P. promelas ) survival & growth	n [USEPA 1000.0]		
100% vs control (4 reps)			\$ 800.00
Five dilution series (4 reps)			\$ 1150.00
Algal growth test ( <i>R. subcapitata</i> [USEPA 1003.0]			
96-hr, 100% vs control (4 reps)			\$ 350.00
96-hr, Five dilution series (4 reps)			\$ 750.00
Biostimulation test (SM8111)			\$ 900.00

\*All toxicity testing MUST be scheduled with the laboratory prior to sample submittal.\*

# **BIOMONITORING / BIOTOXICITY**

SEDIMENT TOXICITY TEST	<u>Cost / Sample</u>
ASTM E 1383	
5 replicates, 20 organisms per replicate, static	
Hyalella azteca, Chironomus spp.	
10-day survival test	\$ 700.00
10-day survival & growth test	\$ 800.00
30-day survival, growth, and reproduction test	\$ 2200.00
EPA 600/R-94/024	
8 replicates, 10 organisms per replicate, renewal	
Hyalella azteca	\$ 1300.00
Chironomus spp.	\$ 1300.00
PRODUCT TESTING	Cost / Sample
Screening	\$ 150.00 *
*plus Acute or Chronic fees listed on the previous page.	
PRYMNESIN (Golden Algae ) Toxin Screen	\$ 150.00

\*All toxicity testing MUST be scheduled with the laboratory prior to sample submittal.\*

### ORGANISM IDENTIFICATION AND QUANTIFICATION

lgae_	<u>Cost / Sample</u>
Identification (only) to Division level	\$ 45.00
Identification (only) to Genus level	\$ 75.00
Quantification (total cell count)	\$ 50.00
Golden algae screen	\$ 50.00
Identification & Differential Quantification to Genus	\$ 100.0
Identification & Differential Quantification to Species	\$ 250.0
Chlorophyll a	\$ 50.0
Chlorophyll a & Pheophytin a	\$ 60.0
Chlorophyll a, b, c, & Pheophytin a	\$ 80.0
poplankton	Cost / Sampl
Identification (only) to major taxa	\$ 60.0
Quantification (total count)	\$ 50.0
Identification & Differential Quantification to major taxa	\$ 100.0
quatic Invertebrates	<u>Cost / Sampl</u>
Identification includes:	\$ 125.0
Insects (to Order level)	,
Nematodes(to Phylum level)	
Flatworms (to Class level)	
Annelids (to Class level)	
Mollusks (to Family level)	
	Cost / Sampl
licroscope Evaluations	
Microscopic Particulate Analysis (MPA)	\$ 375.0
General microscopic Identification of unknown material	\$ 75.00/hr
Particle count / identification	\$ 75.00/hr
*minimum.	
Enteric Virus	\$ 600.0
	640E 0
Parasites – extraction plus	\$425.0
Giardia lamblia	\$ 65.0
Cryptosporidium	\$ 65.0
Ascaris (common large tapeworm)	\$ 50.0
Entamoeba histolytica	\$ 65.0
Common tapeworm	\$ 65.0
Ascaris only	\$ 150.0
Common tapeworm only	\$ 150.0

#### **GENERAL CHEMISTRY ANALYSIS**

#### Water/Wastewater

Analyte	<u>Cost /</u> <u>Sample</u>	<u>Analyte</u>	<u>Cost /</u> Sample
Acidity	\$ 20.00	Nitrogen, Total N (TKN+NO3+NO2)	\$55.00
Acidity / Soil	\$ 20.00	ORP (Redox Potential)	\$50.00
Alkalinity	\$ 20.00	Oxygen, Dissolved	\$20.00
Ash	\$45.00	Oil & Grease (HEM)	
Biochemical Oxygen Demand	\$ 40.00	Gravimetric (1664 Hexane)	\$ 100.00
Bromide	\$ 20.00	Perchlorate	\$175.00
Carbon Dioxide	\$ 30.00	рН	\$ 15.00
Chemical Oxygen Demand	\$ 40.00	Phenol, total (EPA 420.1)	\$ 100.00
Chloride	\$ 20.00	Phosphorus, Total	\$ 30.00
Chlorine, free	\$ 20.00	Phosphorus, Ortho	\$ 20.00
Chlorine, total	\$ 20.00	Silt Density Index (SDI)	\$50.00
Chromium, hexavalent	\$ 65.00	Silica, Soluble	\$ 25.00
Color	\$40.00	Solids, Dissolved	\$ 25.00
Conductivity	\$20.00	Solids, Suspended	\$25.00
Corrosivity (Langlier Index)	\$75.00	Solids, Settleable	\$ 25.00
Cyanide (CN), total or amenable	\$ 20.00	Solids, Total	\$ 25.00
EDS Scan +	\$ 180.00	Solids, Volatile	\$ 45.00
Electrical Conductivity	\$50.00	SOUR	\$145.00
Fluoride	\$20.00	SSC * (Single)	\$40.00
Formaldehyde	\$50.00	SSC * (Multiple)	\$100.00
Hardness, Total	\$20.00	Sulfate	\$ 20.00
Iron, Ferrous	\$50.00	Sulfide, Total	\$25.00
Langlier/Ryznar Index	\$75.00	Sulfide, Dissolved	\$25.00
MBAS	\$85.00	Sulfite	\$40.00
Moisture %	\$25.00	Surfactants (MBAS)	\$85.00
Nitrogen, Ammonia	\$20.00	Tannin/Lignin (Extractable)	\$100.00
Nitrogen, Kjeldahl	\$35.00	Total Organic Carbon (TOC)	\$60.00
Nitrogen, Nitrate + Nitrite	\$20.00	TPHC (HEM + SGT)	\$100.00
Nitrogen, Nitrate (only)	\$20.00	Turbidity	\$20.00
Nitrogen, Nitrite (only)	\$20.00	Threshold Odor Number (TON)	\$100.00
		UV254	\$50.00

+ Energy-dispersive X-ray spectroscopy

\*Suspended sediment concentration

# **METALS ANALYSIS**

<u>Parameter</u>	<u>Cost / Element</u>
Aluminum (Al)	\$15.00
Antimony (Sb)	\$15.00
Arsenic (As)	\$15.00
Barium (Ba)	\$15.00
Beryllium (Be)	\$15.00
Boron (B)	\$15.00
Cadmium (Cd)	\$15.00
Calcium (Ca)	\$15.00
Chromium (Cr)	\$15.00
Chromium, Hexavalent (Cr <sup>6</sup> )	\$65.00
Cobalt (Co)	\$15.00
Copper (Cu)	\$15.00
Iron (Fe),	\$15.00
Iron, Ferric (Fe <sup>+++</sup> )	\$25.00
Iron, Ferrous (Fe <sup>++</sup> )	\$50.00
Gold (Au)	\$25.00
Lead (Pb)	\$15.00
Lithium (Li)	\$15.00
Magnesium (Mg)	\$15.00
Manganese (Mn)	\$15.00
Mercury (Hg)	\$45.00
Molybdenum (Mo)	\$15.00
Nickel (Ni)	\$15.00
Palladium (Pd)	\$25.00
Potassium (K)	\$15.00
Selenium (Se)	\$15.00
Silver (Ag)	\$15.00
Sodium (Na)	\$15.00
Strontium (Sn)	\$15.00
Thallium (Tl)	\$15.00
Tin (Sn)	\$15.00
Vanadium (V)	\$15.00
Zinc (Zn)	\$15.00
Zirconium (Zr)	\$25.00

#### SAMPLE PREPARATION

Method Number	<u>Matrices</u>	Cost/Sample
3005, 3010, 3020	Water, Wastewater	\$30.00
3050	Soils, Sediments, Solids	\$30.00
1311 (TCLP)	Toxicity Characterization Leaching Procedure	\$100.00
1312 (SPLP)	Synthetic Precipitation Leaching Procedure	\$125.00
ASTM	Soluble Metals	\$30.00

Page 14 of 20

# **GROUP ANALYSIS**

Safe Drinking Water Act/Maricopa County New Source Approval	Cost/Sample
Inorganic Compounds	
Metals (Sb, As, Ba, Be, Cd, Cr, Ni, Hg, Se, Tl, Cyanide (CN), Fluoride (F),	
Nitrate (as N), and Nitrite (as N)	\$300.00
Asbestos	\$175.00
Recommended Inorganic Compounds	
Primary – As, Ba, Cd, Cr, F, Hg, NO <sub>3</sub> , NO <sub>2</sub> , Se	\$150.00
Secondary – Ca, Cu, Fe, Pb, Mg, Mn, Na, Zn, Alkalinity, Chloride, Hardness,	
pH, Sulfate, TDS	\$150.00
Lead (Pb) and Copper (Cu)	\$30.00
Langlier/Ryznar Index (pH, Temperature, Calcium Hardness, Alkalinity, TDS	\$75.00
Microbiology	
Coliform, Total (Colilert)	\$25.00
Radiochemical	
Gross a **	\$50.00
Radium 226/228 (** May be required with positive detection)	\$215.00
Uranium (U)	\$180.00
Volatile Organic Compounds (EPA 524)	\$175.00
MTBE (methyl+butylethane)	\$200.00
Semi-Volatile Organic Compounds (less Dioxin & Glyphosate)	
EPA Methods 525.2, 531.1, 508, 515.1, 504, 548, 549.1	\$1275.00
2, 3, 7, 8 – TCDD (Dioxin) EPA Method 1613 *	\$600.00
Glyphosate – EPA Method 547 *	\$150.00
*Waiver program available. Contact ADEQ for details.	
Disinfection By-Products	
Trihalomethanes (THMs) EPA Method 524.2	\$150.00
Haloacetic Acids (HAAs) EPA Method 552.2	\$160.00
New Source Approval (depending on parameter list)	~ \$3000.00
Microscopic Particulate Analysis (MPA)	\$375.00

# GROUP ANALYSIS (Continued)

Resource Conservation & Recovery Act	Cost/Sample
Hazardous Waste Characterization	
рН	\$15.00
Paint Filter	\$25.00
Flash Point	\$75.00
Reactivity (Cyanide, Sulfide, and Water)	\$180.00
8 RCRA Heavy Metals by TCLP (As, Ba, Cd, Cr, Pb, Hg, Se, Ag)	\$250.00
8 RCRA Heavy Metals by digestion (As, Ba, Cd, Cr, Pb, Hg, Se, Ag)	\$180.00
13 Priority Pollutants (Sb, As, Be, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag, Tl, Zn)	\$255.00
Clean Water Act	<u>Cost/Sample</u>
National Pollution Discharge Elimination System (NPDES/AZPDES)	
Municipal Disharge Water Quality Monitoring	
рН	\$15.00
Sulfides	\$25.00
Total Petroleum Hydrocarbons [HEM-SGT]	\$100.00
Cyanide	\$60.00
Metals (see metals analysis section)	
	Cost/Sample
Total Toxic Organics (TTO)	\$625.00
Volatile Organic Compounds – EPA Methods 624/8260	\$175.00
Semi-Volatile Organic Compounds – EPA Methods 625/8270	\$275.00
Chlorinated Pesticides – EPA Method 608/8080	\$150.00
Chlorinated Herbicides – EPA Method 615/8151	\$200.00

# **BIO-SOLIDS ANALYSIS**

Test Group	<u>Cost/Sample</u>
503 Nutrients (NH <sub>3</sub> , TKN, NO <sub>3</sub> +NO <sub>2</sub> , P-T)	\$100.00
503 Metals (As, Cd, Cr, Cu, Pb, Hg, Mo, Ni, Se, Zn)	\$210.00
Fractional Volatile Solids Reduction	\$450.00
SOUR (includes TS, VSS)	\$145.00
Total Solids (TFS, TS, TVS)	\$70.00
Hazardous Waste Disposal	
EPA 8260 TCLP-ZHE (Volatiles)	\$250.00
EPA 8270 TCLP-ZHE (Semi-Volatiles)	\$450.00
EPA 8081 Pesticides (TCLP)	\$250.00
EPA 8151 Herbicides (TCLP)	\$300.00
Enteric Virus	\$650.00
Salmonella	\$50.00

# GENERAL AGRONOMY AND SOIL TESTS

Test Group	Method	Cost/Sample
Cations:		
Ca, Mg, Na, K, cation exchange capacity (CEC), exchangeable sodium	SPAC-NAA ICP	\$60.00
Minor elements:		
Cu, Fe, Mn, Zn	SPAC-DPTA	\$60.00
Boron	SPAC-ICP	\$20.00
Sulfate/Sulfur	ASA 79-4	\$20.00
Nitrate	SPAC DPTA	\$20.00
Kjeldahl nitrogen	ASA 83-7	\$40.00
Phosphate/Phosphorus	SPAC DPTA	\$30.00
Salinity (Soluble salts/electrical conductivity)	ARIZ 237B	\$20.00
рН	ARIZ 237B	\$15.00
Organic matter	ASA 90-3	\$30.00
Cation exchange capacity	ARIZ 57-3	\$60.00
Chloride	ARIZ 736	\$20.00
Free lime (qualitated)		\$10.00
Lime (quantitated)		\$30.00
Petiole analysis (nitrate)		\$20.00
Petiole analysis (nitrate+phosphorus)		\$40.00
Soil herbicide bioassay		\$100.00
Agronomic/landscape data assessment		\$35.00

# FIELD SAMPLING/CONSULTATION FEES

Field Sampling			<u>Cost</u>
	Travel, per hour (2 hr minimum)		\$75.00
	Mileage, per mile		\$0.75
	Specimen Collection, per hour		
		Field Biologist/Chemist	\$75.00
		Project Manager	\$110.00
		Principal, Senior Staff	\$150.00
Sample pick-up	<u>Service</u>		
	Routine sample pick-up		\$50.00
	(24 hour notice is required for sc	heduling)	
<b>Consultation</b>			
	Expert Witness		\$250.00
	Research or Report Prep		
		Field Biologist/Chemist	\$75.00
		Project Manager	\$110.00
		Principal, Senior Staff	\$150.00
		Clerical	\$45.00
<b>Miscellaneous</b>			
	Disposal Fee *		\$5.00
	Minimum Invoice Fee		\$25.00
	Sample Hold Charge (per sample)		\$5.00
	Compositing Fee (per sample)		\$10.00

\*Applied to any sample determined to be a hazardous/special waste.

