SDMS DOCID# 1120640

SAMPLING PLAN

33777 Valley Center Road
in
Valley Center, California

CLIENT: Marvin Donius
33777 Valley Center Road
Valley Center, CA 92028

PREPARED BY: *Marc Boogay*
Consulting Engineer
326 Main Street
Vista, California 92084

DATE: Revised, April 14, 2008

PROJECT NUMBER: 08-0311

IMPORTANT NOTICE: This report is confidential. It may not be read or relied upon, except by the Client and U.S. EPA.

ABSTRACT

The property identified by the address 33777 Valley Center Road in Valley Center, California (the "site") had been in use as a mushroom farm, as well as being occupied by several other tenants that included a citrus packer and a tow yard. In October of 2007, fire destroyed all onsite buildings as well as most else located onsite including several cars in the paved tow yard, several trucks parked in an unpaved lot, several aboveground tanks (one containing diesel fuel), and an area used as a secondary containment for waste oil drums. Remaining building materials and destroyed vehicles are currently being demolished and removed from the subject site.

This sampling plan will address the possibility of impact to underlying soil and groundwater from possible releases of diesel fuel from a burst aboveground diesel fuel tank, possible release from a secondary containment area used for waste oil, possible release that may have occurred beneath burning vehicles, water quality in an onsite groundwater production well, and layout of onsite wastewater disposal systems.

This plan provides for near-surface soil sampling in several areas, composite samples of burn ash, sampling of groundwater produced by the onsite well, and identification of areas used by the onsite wastewater treatment system.

SIGNATURE

This sampling plan was completed by me or under my direction.

REGISTERED ENVIRONMENTAL ASSESSOR
MARC A. BOOGAY
NO. 478
EXP: 63008
STATE OF CALIFORNIA

Marc Boogay
California Registered Environmental Assessor No. 478

April 14, 2008

TABLE OF CONTENTS

ABSTRACT 1

SIGNATURE 1

TABLE OF CONTENTS 2

APPENDICES 2

1.0 AUTHORIZATION 3

2.0 OBJECTIVE AND APPROACH 3

3.0 BACKGROUND 3

3.1 The Subject Site Prior to the October 2007 Fire 3
3.2 The Subject Site Subsequent to the October 2007 Fire 5

4.0 PROPOSED SOIL SAMPLING PROCEDURES AND OBSERVATIONS 6

4.1 Contaminants of Concern 6
4.2 Proposed Sampling Locations 6
4.3 Sampling Equipment and Procedures 7
4.4 Proposed Laboratory Analyses 9
4.5 On-site Wastewater Disposal System Assessment 10

APPENDICES

APPENDIX I MAP OF SUBJECT SITE (HIGHLIGHTING AREAS OF INTEREST)

APPENDIX II SUBJECT SITE PHOTOGRAPHS

APPENDIX III LABORATORY CERTIFICATION DOCUMENT

APPENDIX IV SCHEDULE FOR SAMPLE CONTAINERS, HOLDING TIMES, AND DETECTION LIMITS

1.0 AUTHORIZATION

This Sampling Plan is prepared in accordance with a contract between Marvin Donius (the "Client") and *Marc Boogay Consulting Engineer (MBCE)*, dated on March 20, 2008. Work concerned the property identified by the address 33777 Valley Center Road in Valley Center, California (the "site"), located on the Rincon Indian Reservation.

2.0 OBJECTIVE AND APPROACH

The subject site comprises an approximately 3-acre area, comprised of both paved and unpaved areas. It had previously included several buildings used for the cultivation of mushrooms, as well as several above-ground tanks, a paved parking lot in use by a towing company, an unpaved area used for parking trucks and RVs, as well as additional areas. All structures were destroyed by fire; most are now demolished, and most burned remains await removal.

The objective of this sampling plan is to guide progress toward environmental site assessment of the subject site, especially as regards fire-related release. It includes description of sampling and analyses for shallow soil beneath areas of (suspected) released petroleum hydrocarbons, sampling and analysis of burn ash, assessment of water quality from an onsite production well, and assessment of location and extent of onsite wastewater system(s), i.e., septic tank(s) and percolation field(s).

3.0 BACKGROUND

For purposes of this report, directions along Valley Center Road will be cited as "north" and "south," with perpendicular directions referred to as "east" and "west." The subject site was on the east side of Valley Center Road, in an area by reservation land, including the *Harrah's Rincon Casino and Resort*, as well as private residential land.

Several tenants occupied the subject site prior to the October 2007 fire; these included *Mushroom Express, Automotive Specialists* (a towing company), a citrus packer, a lawn care company, a security company using part of the site for parked trailers, and two residential apartments. At the time of the visit conducted in relation to this study, some tenants had recently begun to resume limited operations onsite, mostly parking/storage-related usages.

3.1 The Subject Site Prior to the October 2007 Fire

The site was the subject of a 2007 Phase I [1], in which the exterior site was described as follows:

> The buildings were located near the center of the subject site lot, which was paved mostly in asphaltic concrete (AC). A driveway from Valley Center Drive ran near the west center side of the subject site lot. A chain-link fence surrounded the subject site on

[1] "Phase I Environmental Site Assessment 33777 Valley Center Road in Valley Center, California, Marc Boogay Consulting Engineer, August 16, 2007.

all sides. Immediately west of the buildings, just off of Valley Center Drive, was a vacant area that appeared to be used for general parking. Cover plates at grade were noted near the northwest corner of the southern building; these were said to be access-ways to one or more septic tanks.

At the southwest corner of the subject site was a trailer in use as an office for Automotive Specialists, a tenant of the subject site. The southeast corner of the subject site was separately fenced and said to be subleased to a tow yard for Automotive Specialists. This lot was paved in Portland cement concrete (PCC) and was occupied by parked cars, many of which were collision-damaged. Near the west end of this yard was a fenced dog enclosure and an unlabeled drum. Along the south wall of the southern building, immediately north of the vehicle yard, were several large piles of flattened cardboard boxes.

The area between the two concrete buildings was paved in PCC and appeared to be in use for miscellaneous storage. Stacks of boxes and crates were located along the sides of both buildings, a forklift, and several unused air conditioning units, an unused water softener tank, and two larger tanks were here. One of these tanks was 1000-gallon in size and was said to have been an onsite, in-ground gasoline tank; another was described an unused diesel fuel tank. A grade-mounted transformer was at the west end of this area.

The area immediately north of the buildings was also paved in PCC, and then sloped downhill. Here were stacks of pallets, piles of metal parts and scrap, and miscellaneous storage.

Downhill from this paved area, the remaining northern portion of the subject site was unpaved. This area was mostly covered with parked trucks, most of them owned by Mushroom Express. Several trailers were parked near the northwest corner of this lot. Two large autoclaves were near the north center portion of the subject site, as were piping, metal sheeting and scrap, lumber piles, tires, sheet-metal, and unused storage containers.

At the northeast corner of the subject site property was a separately fenced 1-acre lot. This was occupied by a lawn care company and consisted mostly of vacant, graded land. Piles of soil/gravel and a small bulldozer were also here.

Along the east side of the subject site, behind the buildings, was an unpaved area. A small wooden hut housed a water well and associated equipment. Additional crates, boxes, and packing materials were stored nearby. An aboveground tank was located along the east side of the subject site, in concrete block saddles. This held diesel fuel and was in use. Pavement beneath the tank appeared intact, and a small amount of stained soil was noted alongside the dispenser.

A shed was located immediately south of the aboveground tank; this was inaccessible. On the south side of the shed was a concrete block secondary enclosure holding drums of waste oil. A small water heater associated with a hand washing station adjoined this. Minor staining of PCC pavement near the secondary containment was noted.

On the east end of the southern concrete building was an overhead shade covering a large fruit-packing apparatus, consisting of conveyor belts, chutes, and a cleaning apparatus for fruit (a "dry brush bed"). No liquids or chemicals were observed in association with this operation. Ladders, boxes, and related materials were stored against the east side of the main building, below the packing apparatus.

Typical utilities were observed on or adjacent to the site. These included water, electricity and natural gas, and telephone. Overhead power lines were observed along the Valley Center Road.

The site's electricity/natural gas was provided by San Diego Gas & Electric and the water was provided to the site by the Valley Center Municipal Water District. The subject site was noted to have a septic tank and onsite wastewater disposal system, evidently for sink/toilet wastewater flows only.

It has also been reported that a sump exists at the site in the main corridor between buildings. This was described as a vault without piping, used for collection of runoff for reuse elsewhere on site.

3.2 The Subject Site Subsequent to the October 2007 Fire

Subsequent to the October 2007 fire, the subject site appeared unchanged except for vast fire damage. The center area, where building had been located, comprised piles of concrete and metal rubble and scrap. Some of this was sorted and arranged in organized piles; other areas appeared not to have been sorted.

The southeast corner of the subject site, which had been the location of the towing yard, was still paved, and a number of cars were observed here. Several cars had been completely destroyed by the fires and materials from these vehicles were noted on the pavement. Condition of the pavement appeared relatively intact; no very large cracks or areas where penetrations of automotive contaminants were likely to have seeped through asphalt materials were noted. At the northeast corner of this paved area was the area used as a secondary containment for drums of waste oil. This area had also been damaged by fire, and it appeared that all oily products here had been burnt away. Small, residual amounts of waste oil mixed with water, etc. were observed in drums here.

The aboveground diesel fuel storage tank along the east edge of the subject site was severely damaged. This had exploded in the fire and no fuel remained. An explosion caused by the fire appeared to have blown off the south end-plate of the tank (a horizontal cylinder) and to have moved the entire tank ca. 1.5-feet north of its original location in the concrete saddle. Pavement was noted beneath the associated dispenser; however, areas beneath the tank and within a few feet were unpaved.

The wooden hut/shed structure that had previously surrounded the existing onsite water well had been destroyed; however the main elements of the well and its associated piping appeared undamaged.

On the north side of the subject site, immediately north of the paved area that was the previous location of the onsite buildings, was an area where several large trucks had been parked. These were also seriously damaged in the fire, and the area had dark ash on the ground. The remains of the trucks and been removed, and the top layer of soil appeared to have been raked

over. Small piles of ash and related remnants of the fire were observed in this general area and across the entire site.

4.0 PROPOSED SOIL SAMPLING PROCEDURES AND OBSERVATIONS

4.1 Contaminants of Concern

Soil in the area around the burst diesel fuel tank is suspected of having impact from diesel fuel.

Soil in the area of fire-damaged vehicles parked over an unpaved area is suspected of having impact by petroleum hydrocarbons in the diesel fuel and gasoline ranges and by heavier hydrocarbons, e.g., motor or hydraulic oils.

Soil in the area around the secondary containment area used for waste oil is suspected of having impact from waste oil, i.e., motor or hydraulic oils.

Burn-ash is suspected of containing elevated levels of metals, e.g., heavy metals including copper, zinc, chrome, etc.

Water is suspected of having impact by components of petroleum hydrocarbons, viz., fuels and lubricants. This sample is also to be analyzed for most typical inorganic analytes as listed in Table 64431-A of the California Safe Drinking Water Act & Related Laws and Regulations [2], as well as for the VOCs/SOCs listed in Table 64444-A of the same document.

Petroleum products are suspected in any sludge or runoff as may have collected in the sump centrally located between site buildings.

4.2 Proposed Sampling Locations

At each soil sample location, specimens will be taken from near-surface (ca. 0.5-feet deep) and shallow (1-to-2-foot deep) soil. Location selection will be biased by apparent staining or odors or on lowest area. Where no basis for such bias exists, soil samples shall be taken as noted below. A deeper (ca. 3-4-foot) soil sample will be taken at each location if petroleum-product is detected in soil vapor from the 1-to-2-foot deep sample. Sampled materials shall be as follows:

1- Soil from the unpaved area alongside a secondary containment structure for waste oil (located along the east side of the subject site, near the northeast corner of the lot previously used by the towing company). If no basis for location selection bias exists, select two locations randomly about one foot from the north and south corners of the containment.

2- Soil from unpaved areas beneath and alongside the aboveground storage tank (used for diesel fuel), located near the center of the east side of the subject site. If no basis for location selection bias exists, select three locations at 25-, 50-, and 75-percent points along the area's longest dimension. Samples will be taken from near-surface (ca. 0.5-feet deep) and shallow (1-to-2-foot deep) soil.

3- Soil from the unpaved area immediately north of the paved center of the subject site and the previously existing buildings, where several vehicles were destroyed by fire and

[2] California Regulations Related to Drinking Water, from Title 22 California Code of Regulations, California Safe Drinking Water Act & Related Laws and Regulations:" last updated October 11, 2007.

where ash and darkened soil was observed. Four locations will be selected for shallow (1-to-2-foot deep) samples here. Each will be from a random part of a selected grid element.

4- Water from the onsite water production well will be sampled.

5- Two composite samples will be taken of burn-ash. One will be taken from several locations on the west side of the subject site, and another will be similarly taken from the east side.

6- The sump is to be checked for condition and content. Any liquid or semi-liquid seen in the sump is to be sampled and analyzed for petroleum product content.

4.3 Sampling Equipment and Procedures

Field Equipment

Soil sampling will be performed by use of a hand-held, low-powered soil-drill with a 3-inch diameter auger until the target depth is reached. A 2-inch diameter hand-auger will also be available on the site. A slide-hammer driven sampler with a removable stainless steel liner will be used to acquire the samples. A spade and several new trowels will be on hand at the site. Quart-sized polyethylene bags with zipper-locked closures will be on hand for further enclosing samples and for the onsite soil vapor assessment.

A flame- or photo-ionization detector shall be used to screen vapor assessment samples noted above.

Burn-ash will be sampled by grabbing material directly from paved or unpaved surfaces. Only glass jars (ca. 200-ml) will be necessary for this work.

Water sampling will be done directly from the onsite well using a portable power supply (if/as necessary) and glass bottles and vials provided by the laboratory. Portable, hand-held meters for temperature, conductivity, and pH are to be on hand.

Field Methods and QC/QA

The soil sampling will involve drilling to target depths by use of a hand-held, powered soil-drill. A slide-hammer will be used to drive a soil sampling device with a removable stainless steel liner to acquire the samples. Polyethylene caps will be placed on the sample liner, which will then serve as the sample container. In the event soils are too sandy or otherwise too non-cohesive for this method, glass jars (ca. 200-ml) will be used to catch cuttings directly from the auger.

Soil sample tubes or jars will then be closed by Teflon sheet stretched across the sampler's open end and held in place by threaded, polyethylene caps. In the event soils are too non-cohesive, the hole shall be enlarged as needed (e.g., by a spade) and undisturbed soil shall be cut from the sidewall and moved directly into glass jars (ca. 200-ml). At locations for deeper samples, additional soil shall be taken by the sampling device into a bag for onsite vapor assessment; where this is deemed to indicate significant impact at depth, drilling/sampling will be attempted at greater (ca. 3-4-feet) depth.

The procedure for head space sampling shall be as follows:

1. Obtain soil to fill a quart-sized plastic bag about 1-inch deep across its bottom fold.
2. Close the bag with deliberate attempt to include ambient air.
3. Break up the sample under hand pressure, through the bag material.
4. Wait 1- to 2-minutes and insert the probe of the vapor detector.
5. Record the level indicated.

The burn-ash sampling will be performed by scooping burn-ash residues from paved and unpaved surfaces using a clean sheet of new paper. Samples will be placed in glass jars (ca. 200-ml). Two composite samples will be taken, each from at least three separate areas. One will be made up of material taken from the east side of the site, and another from material taken from the west side.

Prior to sampling of the onsite groundwater well a portable, electric depth-measuring device shall be used to sound the well depth. Sampling shall be by directly holding an open sampling vessel (typically 1-liter brown glass bottles and 40-mL vials) beneath the adjoining open valve. The well will be run for at least 5-minutes prior to sampling to ensure purging of water in the well and that the sample is representative of water in the soil formation. One water specimen will be taken.

The procedure for well sampling shall be as follows:

1. Sound the well for groundwater depth.
2. Note the time, and energize well pump with completely open-pipe flow. Immediately take a pre-purge sample.
3. Note temperature, conductivity, and pH.
4. Use a 5-gallon graduated bucket and a watch to assess the well pump flow rate. Based on the owner-reported flow rate of 10-gallons-per-minute and the well volume (290-gallons, calculated at 10-inch diameter and 70-foot length), run the well to local drainage for a period equivalent to at least 29-minutes. Recheck temperature, conductivity, and pH every ten minutes.
5. Take a sample of post-purge groundwater. Again check temperature, conductivity, and pH, to verify these parameters are not changing by more than 10-percent of the scale reading.

Sampling of liquids or sludges in the sump shall be by dipping 40-ml vials into the vault contents; in the event its depth is too small for dipping, the contents shall be scooped by a new trowel.

All efforts will be made to limit release of volatile chemicals from the samples by filling the sample container with minimal headspace and by sealing the samples quickly and tightly, using plastic caps. Groundwater samples will be taken by use of 40-mL vials. Again all efforts will be made to limit release of volatile chemicals from the samples by filling the sample container with minimal headspace and by sealing the samples quickly and tightly, using plastic caps. The composite sample will be taken in a large (1-gallon) polyethylene bag with zippered closure. Ash will be massaged into homogeneity and a composite sample transferred to a 4-oz. glass jar.

The scope of environmental risk at the site is not deemed to warrant additional expense for duplicate samples and field blanks.

Sample Labeling/Documentation

Samples will be immediately identified on labels to be on the sample container and further secured by placement into polyethylene bags with zip-locking closures.

Logbook Maintenance

A logbook will be kept at the site, and entries will include time, location, and observations of all material events during the course of the field work.

Containers/preservatives, etc.

Soil containers will be the sampling tube closed with polyethylene caps or, alternately, will be 200-ml glass jars. Groundwater samples will be in brown 1-liter glass bottles and in 40-ml glass vials with sample-drawing septa. All samples will be individually labeled and put into individual protective polyethylene bags with zip-locked closure; following this, each will be immediately placed within an insulated and iced cooler. Samples will be delivered by *Golden State Overnight* courier service without delay to the laboratory.

American Scientific Laboratory will be used for analysis; its certification is provided as Appendix III.

4.4 Proposed Laboratory Analyses

Soil samples from the area with the burst diesel fuel tank will be analyzed for "total petroleum hydrocarbons" in the diesel fuel range using EPA Method 8015. Soil samples from the area where an unpaved area was beneath fire-damaged parked vehicles will be analyzed for "total petroleum hydrocarbons" in both gasoline and diesel fuel ranges using EPA Method 8015. Soil in the area around the waste oil storage containment would be analyzed for "total recoverable petroleum hydrocarbons" using EPA Method 418.1.

Burn-ash will be analyzed for metallic content using the sweep of TTLC-CCR Title 22 Metals (formerly the CAM 17 metals sweep), including the elements, Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Hg, Mo, Ni, Se, Ag, Ti, V, and Zn).

Groundwater will be analyzed for impact by for petroleum hydrocarbons in fuel using the examinations, "total petroleum hydrocarbons" EPA Method 8015 (to include both diesel fuel and gasoline ranges), "total recoverable petroleum hydrocarbons" EPA Method 418.1 (to include hydraulic and lubricating oils), "BETX", for benzene, toluene, ethylbenzene, xylene, oxygenates, and other gasoline constituents/solvents EPA Method 8260. This sample is also to be analyzed for most typical inorganic analytes as listed in Table 64431-A of the California Safe Drinking Water Act & Related Laws and Regulations [3], as well as for the VOCs/SOCs listed in Table 64444-A of the same document.

Containers to be used and holding times and detection limits involved with the analyses are described in the table attached as Appendix IV. The laboratory's pre-printed chain-of-custody

---

[3] California Regulations Related to Drinking Water, from Title 22 California Code of Regulations, California Safe Drinking Water Act & Related Laws and Regulations:" last updated October 11, 2007.

form shall be used, with sample numbers, sample container, specified analyses, and signature spaces for personnel accepting or relinquishing custody of the specimens.

4.5 On-site Wastewater Disposal System Assessment

A local contractor with experience in septic system forensics will be retained to map out the percolation systems including septic tanks, "tight" lines, and percolation lines. These will be flagged in the field, and rough surveyed so that they can be drawn onto a site plan.

APPENDIX III LABORATORY CERTIFICATION DOCUMENT

Follows this page.

STATE OF CALIFORNIA
DEPARTMENT OF HEALTH SERVICES
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM

ENVIRONMENTAL LABORATORY CERTIFICATION

Is hereby granted to

AMERICAN SCIENTIFIC LABORATORIES, LLC

2520 N SAN FERNANDO ROAD
LOS ANGELES, CA 90065

Scope of certification is limited to the
"Accredited Fields of Testing"
which accompanies this Certificate.

Continued certification status depends on successful completion of site visit, proficiency testing studies, and payment of applicable fees.

This Certificate is granted in accordance with provisions of Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **2200**

Expiration Date: **01/31/2009**

Effective Date: **01/01/2007**

Richmond, California
subject to forfeiture or revocation

George C. Kulasingam, Ph.D.
Program Chief
Environmental Laboratory Accreditation Program

WATER RECLAMATION
SOLID WASTE MANAGEMENT

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

JAMES F. STAHL
Chief Engineer and General Manager

March 12, 2003
Laboratory I.D. No. 10223

Rojert G. Araghi
Laboratory Director
American Scientific Laboratories, LLC
2520 North San Fernando Road
Los Angeles, California 90065

Dear Mr. Araghi:

The County Sanitation Districts of Los Angeles County (Districts) *Wastewater Ordinance* specifies that all required industrial wastewater analyses be performed by a California State Certified laboratory or by a laboratory approved by the Sanitation Districts.

The Districts recognize your revised certification as an Environmental Laboratory by the State of California Department of Health Services and will accept the sample results for those analyses which you are certified to perform. The laboratory identification number appearing on this letter **must** be included on all analysis reports submitted to the Districts.

Continued recognition of your certification shall be maintained by periodic satisfactory completion of performance sample analyses, compliance with Districts' requirements and an adequate rating on any future visits by Districts' personnel. Please notify the District upon any changes of name, address, telephone number, or supervisory personnel.

If you have any questions regarding this laboratory approval, please contact David B. Whipple of the Sanitation Districts' Industrial Waste Section at extension 2909.

Very truly yours,

James F. Stahl

Linda M. Shadler
Supervising Civil Engineer
Industrial Waste Section

LMS:DBW:dfd
Docs: 209260

Recycled Paper

APPENDIX IV SAMPLE CONTAINERS, DETECTION LIMITS, AND HOLDING TIMES

Follows this page.

Date 04/14/2008
Time 16:17:59

Analytical Methods List Detail Report

Report Includs Method: 300 And Sub Method: 300.S

Method & Submethod	Description:	Laboratory	Class	Misc Code	QC Type
300	Anions by Ion Chromatography	INOR	DEF	DEF	LCS

Analytes List

Analytes	MDL	PQL	Remark
Conventionals			
Chloride	0.241	1.00	CL
Fluoride	0.013	0.10	F
Nitrate as N	0.007	0.10	NO3N
Nitrite as N	0.0052	0.05	NO2N
Sulfate	0.07	1.00	SO4

Quality Control Element List

Analytes	LCS	LCS RPD	MS	MS RPD	SM	SM RPD	ICV	CV
Conventionals								
Chloride [CL]	90-110	10	80-120	20				
Fluoride [F]	90-110	10	80-120	20				
Nitrate as N [NO3N]	90-110	10	80-120	20				
Nitrite as N [NO2N]	90-110	10	80-120	20				
Sulfate [SO4]	90-110	10	80-120	20				

Weck Laboratories, Inc

2/7/2008

Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike / LCS %R	Blank Spike / LCS RPD
Perchlorate (RL 4ug/L) in Water (EPA 314.0)								
Preservation: Unpreserved								
Container: 250 mL Poly			**Amount Required:** 250 mL			**Hold Time:** 28 days		
Perchlorate	0.45	4.0 ug/l		15	80 - 120	15	85 - 115	15

Weck Laboratories, Inc

3/6/2008

Analytical Method Information

Analyte	MDL	Reporting Limit	Surrogate %R	Duplicate RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike / LCS %R	Blank Spike / LCS RPD
200.8-Metals full list in Water (EPA 200.8)								
Preservation: HNO3								
Container: 250 mL Poly - Metals - HNO3			**Amount Required:** 250 ml			**Hold Time:** 180 days		
Total Beryllium	0.022	0.10 ug/l		30	70 - 130	30	85 - 115	30
Total Aluminum	0.19	5.0 ug/l		30	70 - 130	30	85 - 115	30
Total Titanium	0.050	2.0 ug/l		30	70 - 130	30	85 - 115	30
Total Vanadium	0.0090	0.50 ug/l		30	70 - 130	30	85 - 115	30
Total Chromium	0.012	0.20 ug/l		30	70 - 130	30	85 - 115	30
Total Manganese	0.019	0.20 ug/l		30	70 - 130	30	85 - 115	30
Total Cobalt	0.0050	0.10 ug/l		30	70 - 130	30	85 - 115	30
Total Nickel	0.011	0.80 ug/l		30	70 - 130	30	85 - 115	30
Total Copper	0.022	0.50 ug/l		30	70 - 130	30	85 - 115	30
Total Zinc	0.30	5.0 ug/l		30	70 - 130	30	85 - 115	30
Total Arsenic	0.014	0.40 ug/l		30	70 - 130	30	85 - 115	30
Total Selenium	0.017	0.40 ug/l		30	70 - 130	30	85 - 115	30
Strontium, Total	0.069	0.20 ug/l		30	70 - 130	30	85 - 115	30
Total Zirconium	0.075	0.50 ug/l		30	70 - 130	30	85 - 115	30
Total Molybdenum	0.0090	0.10 ug/l		30	70 - 130	30	85 - 115	30
Total Silver	0.0080	0.20 ug/l		30	70 - 130	30	85 - 115	30
Total Cadmium	0.013	0.10 ug/l		30	70 - 130	30	85 - 115	30
Total Tin	0.018	0.20 ug/l		30	70 - 130	30	85 - 115	30
Total Antimony	0.0080	0.50 ug/l		30	70 - 130	30	85 - 115	30
Total Barium	0.024	0.50 ug/l		30	70 - 130	30	85 - 115	30
Total Tungsten	0.037	0.50 ug/l		30	70 - 130	30	85 - 115	30
Total Thallium	0.020	0.20 ug/l		30	70 - 130	30	85 - 115	30
Total Lead	0.017	0.20 ug/l		30	70 - 130	30	85 - 115	30
Total Thorium	0.038	0.20 ug/l		30	70 - 130	30	85 - 115	30
Uranium	0.019	0.20 ug/l		30	70 - 130	30	85 - 115	30
Total Boron	0.48	1.0 ug/l		30	70 - 130	30	85 - 115	30

Analytical Method Details - Weck Laboratories, Inc

Method	Analyte	MDL	MRL	Units	Surr. %R	DUP RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike %R	Blank Spike RPD	CAS #
Carbamates in Water by EPA Method 531.1											
in Water											
EPA 531.1	Aldicarb sulfoxide	0.33	2.0	ug/l	-	30	65-135	30	80-120	30	1646-87-3
EPA 531.1	Aldicarb sulfone	0.36	2.0	ug/l	-	30	65-135	30	80-120	30	1646-88-4
EPA 531.1	Oxamyl	0.57	2.0	ug/l	-	30	65-135	30	80-120	30	23135-22-0
EPA 531.1	Methomyl	0.34	2.0	ug/l	-	30	65-135	30	80-120	30	16752-77-5
EPA 531.1	3-Hydroxycarbofuran	0.43	2.0	ug/l	-	30	65-135	30	80-120	30	16655-82-6
EPA 531.1	Aldicarb	0.70	2.0	ug/l	-	30	65-135	30	80-120	30	116-06-3
EPA 531.1	Propoxur (Baygon)	0.43	5.0	ug/l	-	30	65-135	30	80-120	30	114-26-1
EPA 531.1	Carbofuran	0.63	5.0	ug/l	-	30	65-135	30	80-120	30	1563-66-2
EPA 531.1	Carbaryl	0.97	2.0	ug/l	-	30	65-135	30	80-120	30	63-25-2
EPA 531.1	Methiocarb	1.4	3.0	ug/l	-	30	65-135	30	80-120	30	2032-65-7
Chlorinated Pesticides and PCBs by EPA Method 508											
in Water											
EPA 508	Aldrin	0.0037	0.050	ug/l	-	25	51-121	25	58-120	25	309-00-2
EPA 508	alpha-BHC	0.0053	0.010	ug/l	-	25	57-127	25	62-125	25	319-84-6
EPA 508	beta-BHC	0.0053	0.050	ug/l	-	25	60-130	25	54-139	25	319-85-7
EPA 508	delta-BHC	0.0046	0.050	ug/l	-	25	67-137	25	63-142	25	319-86-8
EPA 508	gamma-BHC (Lindane)	0.0050	0.050	ug/l	-	25	54-124	25	61-128	25	58-89-9
EPA 508	4,4'-DDD	0.0056	0.020	ug/l	-	25	72-142	25	47-147	25	72-54-8
EPA 508	4,4'-DDE	0.0048	0.010	ug/l	-	25	64-134	25	54-130	25	72-55-9
EPA 508	4,4'-DDT	0.0046	0.020	ug/l	-	25	77-147	25	42-143	25	50-29-3
EPA 508	Dieldrin	0.0044	0.020	ug/l	-	25	52-122	25	52-130	25	60-57-1
EPA 508	Endosulfan I	0.0047	0.020	ug/l	-	25	52-122	25	44-119	25	959-98-8
EPA 508	Endosulfan II	0.0047	0.010	ug/l	-	25	57-127	25	39-120	25	33213-65-9
EPA 508	Endosulfan sulfate	0.0046	0.050	ug/l	-	25	67-137	25	63-158	25	1031-07-8
EPA 508	Endrin	0.0050	0.050	ug/l	-	25	53-123	25	57-148	25	72-20-8
EPA 508	Endrin aldehyde	0.0056	0.050	ug/l	-	25	53-123	25	53-123	25	7421-93-4
EPA 508	Heptachlor	0.0052	0.010	ug/l	-	25	63-133	25	56-142	25	76-44-8
EPA 508	Heptachlor epoxide	0.0058	0.010	ug/l	-	25	52-122	25	57-124	25	1024-57-3
EPA 508	Methoxychlor	0.0064	0.050	ug/l	-	25	70-140	25	45-165	25	72-43-5
EPA 508	Chlorothalonil	0.0060	0.050	ug/l	-	25	56-126	25	61-121	25	1897-5-6
EPA 508	Hexachlorobenzene	0.0050	0.50	ug/l	-	25	65-135	25	65-135	25	118-74-1
EPA 508	Hexachlorocyclopentadiene	0.019	0.050	ug/l	-	25	65-135	25	65-135	25	77-47-4
EPA 508	Propachlor	0.048	0.50	ug/l	-	25	68-138	25	73-133	25	1918-16-7
EPA 508	Trifluralin	0.0080	0.010	ug/l	-	25	68-138	25	73-133	25	1582-09-8
EPA 508	Chlordane (tech)	0.045	0.10	ug/l	-	25	64-134	25	69-129	25	57-74-9
EPA 508	Toxaphene	0.031	1.0	ug/l	-	25	65-135	25	65-135	25	8001-35-2
EPA 508	PCB-1016	0.083	0.10	ug/l	-	25	65-135	25	65-135	25	12674-11-2
EPA 508	PCB-1221	0.084	0.10	ug/l	-	-	-	-	-	-	11104-28-2
EPA 508	PCB-1232	0.064	0.10	ug/l	-	-	-	-	-	-	11141-16-5
EPA 508	PCB-1242	0.070	0.10	ug/l	-	-	-	-	-	-	53469-21-9
EPA 508	PCB-1248	0.049	0.10	ug/l	-	-	-	-	-	-	12672-29-6
EPA 508	PCB-1254	0.068	0.10	ug/l	-	-	-	-	-	-	11097-69-1
EPA 508	PCB-1260	0.069	0.10	ug/l	-	25	70-130	25	65-135	25	11096-82-5
EPA 508	PCBs, Total	0.049	0.50	ug/l	-	-	-	-	-	-	1336-36-3
EPA 508	Tetrachloro-meta-xylene			Surrogate	70-130	-	-	-	-	-	877-09-8
EPA 508	Decachlorobiphenyl			Surrogate	70-130	-	-	-	-	-	2051-24-3
Chlorinated herbicides by EPA Method 515.3											
in Water											
EPA 515.3	Dalapon	0.040	0.40	ug/l	-	30	70-130	30	70-130	30	75-99-0
EPA 515.3	3,5-Dichlorobenzoic acid	0.080	1.0	ug/l	-	30	70-130	30	70-130	30	51-36-5
EPA 515.3	Dicamba	0.080	0.60	ug/l	-	30	70-130	30	70-130	30	1918-00-9
EPA 515.3	Dichloroprop	0.060	0.30	ug/l	-	30	70-130	30	70-130	30	120-36-5
EPA 515.3	2,4-D	0.050	0.40	ug/l	-	30	70-130	30	70-130	30	94-75-7
EPA 515.3	Pentachlorophenol	0.020	0.20	ug/l	-	30	70-130	30	70-130	30	87-86-5
EPA 515.3	2,4,5-TP (Silvex)	0.020	0.20	ug/l	-	30	70-130	30	70-130	30	93-72-1
EPA 515.3	2,4,5-T	0.050	0.20	ug/l	-	30	70-130	30	70-130	30	93-76-5
EPA 515.3	2,4-DB	0.42	2.0	ug/l	-	30	70-130	30	70-130	30	94-82-6

Analytical Method Details - Weck Laboratories, Inc

Method	Analyte	MDL	MRL	Units	Surr. %R	DUP RPD	Matrix Spike %R	Matrix Spike RPD	Blank Spike %R	Blank Spike RPD	CAS #
EPA 515.3	Dinoseb	0.050	0.40	ug/l	-	30	70-130	30	70-130	30	88-85-7
EPA 515.3	Bentazon	0.23	2.0	ug/l	-	30	70-130	30	70-130	30	25057-89-0
EPA 515.3	DCPA	0.020	0.10	ug/l	-	30	70-130	30	70-130	30	1861-32-1
EPA 515.3	Picloram	0.34	0.60	ug/l	-	30	70-130	30	70-130	30	1918-02-1
EPA 515.3	Acifluorfen	0.050	0.40	ug/l	-	30	70-130	30	70-130	30	50594-66-6
EPA 515.3	2,4-DCAA			Surrogate	70-130	-	-	-	-	-	19719-28-9
Diquat and Paraquat by EPA 549.2 in Water											
EPA 549.2	Diquat	0.21	4.0	ug/l	-	30	52-130	30	54-135	30	2764-72-9
Endothall By EPA 548.1 in Water											
EPA 548.1	Endothall	5.6	45	ug/l	-	30	0.1-137	30	0.1-143	30	145-73-3
Fumigants by EPA Method 504.1 in Water											
EPA 504.1	1,2-Dibromoethane (EDB)	0.0070	0.020	ug/l	-	30	65-135	30	70-130	30	106-93-4
EPA 504.1	1,2-Dibromo-3-chloropropane	0.0030	0.010	ug/l	-	30	65-135	30	70-130	30	96-12-8
Glyphosate by EPA 547 in Water											
EPA 547	Glyphosate	1.8	5.0	ug/l	-	30	68-134	30	71-137	30	1071-83-6
Semivolatile Organic Compounds by EPA Method 525.2 in Water											
EPA 525.2	Bis(2-ethylhexyl)adipate	0.23	5.0	ug/l	-	-	70-130	30	70-130	30	103-23-1
EPA 525.2	Molinate	0.051	0.10	ug/l	-	-	70-130	30	70-130	30	2212-67-1
EPA 525.2	Bis(2-ethylhexyl)phthalate	0.51	3.0	ug/l	-	-	70-130	30	70-130	30	117-81-7
EPA 525.2	Dimethoate	0.10	0.20	ug/l	-	-	11-180	30	11-180	30	60-51-5
EPA 525.2	Benzo (a) pyrene	0.073	0.10	ug/l	-	-	70-130	30	70-130	30	50-32-8
EPA 525.2	Prometon	0.16	0.20	ug/l	-	-	12-154	30	12-154	30	1610-18-0
EPA 525.2	Molinate	0.051	0.10	ug/l	-	-	70-130	30	70-130	30	2212-67-1
EPA 525.2	Simazine	0.083	0.10	ug/l	-	-	53-131	30	53-131	30	122-34-9
EPA 525.2	Atrazine	0.047	0.10	ug/l	-	-	70-130	30	70-130	30	1912-24-9
EPA 525.2	Dimethoate	0.10	0.20	ug/l	-	-	11-180	30	11-180	30	60-51-5
EPA 525.2	Diazinon	0.051	0.10	ug/l	-	-	51-128	30	51-128	30	333-41-5
EPA 525.2	Prometon	0.16	0.20	ug/l	-	-	12-154	30	12-154	30	1610-18-0
EPA 525.2	Metribuzin	0.074	0.10	ug/l	-	-	52-130	30	52-130	30	21087-64-9
EPA 525.2	Simazine	0.083	0.10	ug/l	-	-	53-131	30	53-131	30	122-34-9
EPA 525.2	Alachlor	0.070	0.10	ug/l	-	-	68-141	30	68-141	30	15972-60-8
EPA 525.2	Atrazine	0.047	0.10	ug/l	-	-	70-130	30	70-130	30	1912-24-9
EPA 525.2	Diazinon	0.051	0.10	ug/l	-	-	51-128	30	51-128	30	333-41-5
EPA 525.2	Prometryn	0.074	0.10	ug/l	-	-	54-147	30	51-147	30	7287-19-6
EPA 525.2	Bromacil	0.90	1.0	ug/l	-	-	40-139	30	40-139	30	314-40-9
EPA 525.2	Metribuzin	0.074	0.10	ug/l	-	-	52-130	30	52-130	30	21087-64-9
EPA 525.2	Alachlor	0.070	0.10	ug/l	-	-	68-141	30	68-141	30	15972-60-8
EPA 525.2	Metolachlor	0.056	0.10	ug/l	-	-	64-149	30	64-149	30	51218-45-2
EPA 525.2	Prometryn	0.074	0.10	ug/l	-	-	54-147	30	51-147	30	7287-19-6
EPA 525.2	Thiobencarb	0.11	0.20	ug/l	-	-	70-132	30	70-132	30	28249-77-6
EPA 525.2	Bromacil	0.90	1.0	ug/l	-	-	40-139	30	40-139	30	314-40-9
EPA 525.2	Butachlor	0.10	0.20	ug/l	-	-	60-154	30	60-154	30	23184-66-9
EPA 525.2	1,3-Dimethyl-2-NB			Surrogate	73-136	-	-	-	-	-	81-20-9
EPA 525.2	Metolachlor	0.056	0.10	ug/l	-	-	64-149	30	64-149	30	51218-45-2
EPA 525.2	Thiobencarb	0.11	0.20	ug/l	-	-	70-132	30	70-132	30	28249-77-6
EPA 525.2	Triphenyl phosphate			Surrogate	71-150	-	-	-	-	-	115-86-6
EPA 525.2	Butachlor	0.10	0.20	ug/l	-	-	60-154	30	60-154	30	23184-66-9
EPA 525.2	Perylene-d12			Surrogate	48-141	-	-	-	-	-	1520-96-3
EPA 525.2	1,3-Dimethyl-2-NB			Surrogate	73-136	-	-	-	-	-	81-20-9
EPA 525.2	Triphenyl phosphate			Surrogate	71-150	-	-	-	-	-	115-86-6
EPA 525.2	Perylene-d12			Surrogate	48-141	-	-	-	-	-	1520-96-3

Sampling Guide - Weck Laboratories, Inc

Analysis	SpecificMethod	Container	Preservation	Hold (days)	Amount Needed
Carbamates in Water by EPA Method 531.1 in Water					
531.1	EPA 531.1	40 mL VOA Amber Vial - 531 MCAA	<6°C, Na2S2O3 (If Chlorinated), MCAA	28	40 ml
Chlorinated Pesticides and PCBs by EPA Method 508 in Water					
508	EPA 508	1 L Amber Glass - 508	<6°C, Na2S2O3 (If Chlorinated)	7	2000 ml
Chlorinated herbicides by EPA Method 515.3 in Water					
515.3 Herbicides	EPA 515.3	250 mL Amber Glass - 515	<6°C, Na2S2O3 (If Chlorinated)	14	250 mL
Diquat and Paraquat by EPA 549.2 in Water					
549 Diquat	EPA 549.2	1 L Amber Poly - 549	<6°C, Na2S2O3 (If Chlorinated)	7	1000 mL
Endothall By EPA 548.1 in Water					
548.1	EPA 548.1	250 mL Amber Glass - 548	<6°C	7	250 ml
Fumigants by EPA Method 504.1 in Water					
504.1 edb-dbcp	EPA 504.1	40 mL VOA Vial - 504	<6°C, Na2S2O3 (If Chlorinated)	14	80 ml
Glyphosate by EPA 547 in Water					
547	EPA 547	40 mL VOA Amber Vial - 547 - non chlor	<6°C, Na2S2O3 (If Chlorinated)	14	40 mL
Semivolatile Organic Compounds by EPA Method 525.2 in Water					
525.2 507 list	EPA 525.2	1 L Amber Glass - 525 HCl - nonchlorinated	<6°C, Sulfite (If Chlorinated), HCl	14	2000 mL
525.2 Regulated+507	EPA 525.2	1 L Amber Glass - 525 HCl - nonchlorinated	<6°C, Sulfite (If Chlorinated), HCl	14	2000 mL

CALIFORNIA DEPARTMENT OF HEALTH SERVICES
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM
Accredited Fields of Testing

AMERICAN SCIENTIFIC LABORATORIES, LLC
2520 N SAN FERNANDO ROAD
LOS ANGELES, CA 90065

Lab Phone (323) 223-9700

Certificate No: 2200 **Renew Date: 01/31/2005**

Field of Testing: 102 - Inorganic Chemistry of Drinking Water

102.030	001	Bromide	EPA 300.0
102.030	003	Chloride	EPA 300.0
102.030	005	Fluoride	EPA 300.0
102.030	006	Nitrate	EPA 300.0
102.030	007	Nitrite	EPA 300.0
102.030	008	Phosphate, Ortho	EPA 300.0
102.030	010	Sulfate	EPA 300.0
102.520	001	Calcium	EPA 200.7
102.520	002	Magnesium	EPA 200.7
102.520	003	Potassium	EPA 200.7
102.520	005	Sodium	EPA 200.7
102.520	006	Hardness (calc.)	EPA 200.7

Field of Testing: 103 - Toxic Chemical Elements of Drinking Water

103.040	002	Antimony	SM3113B
103.040	010	Lead	SM3113B
103.040	013	Selenium	SM3113B
103.130	001	Aluminum	EPA 200.7
103.130	002	Arsenic	EPA 200.7
103.130	003	Barium	EPA 200.7
103.130	004	Beryllium	EPA 200.7
103.130	005	Cadmium	EPA 200.7
103.130	007	Chromium	EPA 200.7
103.130	008	Copper	EPA 200.7
103.130	009	Iron	EPA 200.7
103.130	011	Manganese	EPA 200.7
103.130	012	Nickel	EPA 200.7
103.130	015	Silver	EPA 200.7
103.130	017	Zinc	EPA 200.7
103.130	018	Boron	EPA 200.7
103.150	002	Antimony	EPA 200.9
103.150	009	Lead	EPA 200.9
103.150	014	Thallium	EPA 200.9
103.161	001	Mercury	EPA 245.2
103.310	001	Chromium (VI)	EPA 218.6

Field of Testing: 108 - Inorganic Chemistry of Wastewater

108.020	001	Conductivity	EPA 120.1
108.040	001	Hardness	EPA 130.2
108.050	001	pH	EPA 150.1
108.060	001	Residue, Filterable	EPA 160.1
108.070	001	Residue, Non-filterable	EPA 160.2
108.100	001	Residue, Settleable	EPA 160.5
108.110	001	Turbidity	EPA 180.1
108.112	001	Boron	EPA 200.7
108.112	002	Calcium	EPA 200.7

As of 02/03/2004 , this list supersedes all previous lists for this certificate number.
Customers: Please verify the current accreditation standing with the State.

108.112	003	Hardness (calc.)	EPA 200.7
108.112	004	Magnesium	EPA 200.7
108.112	005	Potassium	EPA 200.7
108.112	006	Silica	EPA 200.7
108.112	007	Sodium	EPA 200.7
108.120	001	Bromide	EPA 300.0
108.120	002	Chloride	EPA 300.0
108.120	003	Fluoride	EPA 300.0
108.120	004	Nitrate	EPA 300.0
108.120	005	Nitrite	EPA 300.0
108.120	006	Nitrate-nitrite, Total	EPA 300.0
108.120	007	Phosphate, Ortho	EPA 300.0
108.120	008	Sulfate	EPA 300.0
108.130	001	Acidity	EPA 305.1
108.140	001	Alkalinity	EPA 310.1
108.162	001	Chloride	EPA 325.3
108.174	001	Chlorine Residual, Total	EPA 330.5
108.180	001	Cyanide, amenable	EPA 335.1
108.181	001	Cyanide, Total	EPA 335.2
108.191	001	Fluoride	EPA 340.2
108.202	001	Ammonia	EPA 350.3
108.220	001	Nitrate	EPA 352.1
108.240	001	Nitrite	EPA 354.1
108.250	001	Dissolved Oxygen	EPA 360.1
108.262	001	Phosphate, Ortho	EPA 365.2
108.263	001	Phosphorus, Total	EPA 365.2
108.282	001	Sulfate	EPA 375.4
108.290	001	Sulfide	EPA 376.1
108.291	001	Sulfide	EPA 376.2
108.310	001	Biochemical Oxygen Demand	EPA 405.1
108.323	001	Chemical Oxygen Demand	EPA 410.4
108.330	001	Oil and Grease	EPA 413.1
108.350	001	Total Recoverable Petroleum Hydrocarbons	EPA 418.1
108.360	001	Phenols, Total	EPA 420.1
108.370	001	Surfactants	EPA 425.1
108.380	001	Oil and Grease	EPA 1664
108.390	001	Turbidity	SM2130B
108.400	001	Acidity	SM2310B
108.410	001	Alkalinity	SM2320B
108.420	001	Hardness (calc.)	SM2340B
108.421	001	Hardness	SM2340C
108.430	001	Conductivity	SM2510B
108.440	001	Residue, Total	SM2540B
108.441	001	Residue, Filterable	SM2540C
108.442	001	Residue, Non-filterable	SM2540D
108.443	001	Residue, Settleable	SM2540F
108.447	001	Boron	SM3120B
108.447	002	Calcium	SM3120B
108.447	003	Hardness (calc.)	SM3120B
108.447	004	Magnesium	SM3120B
108.447	005	Potassium	SM3120B
108.447	006	Silica	SM3120B
108.447	007	Sodium	SM3120B
108.451	001	Chloride	SM4500-Cl- C

108.465	001	Chlorine	SM4500-Cl G
108.470	001	Cyanide, Manual Distillation	SM4500-CN C
108.472	001	Cyanide, Total	SM4500-CN E
108.473	001	Cyanide, amenable	SM4500-CN G
108.480	001	Fluoride	SM4500-F C
108.490	001	pH	SM4500-H+ B
108.504	001	Ammonia	SM4500-NH3 F
108.506	001	Ammonia	SM4500-NH3 G
108.510	001	Nitrite	SM4500-NO2 B
108.531	001	Dissolved Oxygen	SM4500-O G
108.540	001	Phosphate, Ortho	SM4500-P E
108.541	001	Phosphorus, Total	SM4500-P E
108.580	001	Sulfide	SM4500-S= D
108.590	001	Biochemical Oxygen Demand	SM5210B
108.602	001	Chemical Oxygen Demand	SM5220D
108.630	001	Oil and Grease	SM5520B
108.640	001	Surfactants	SM5540C
108.660	001	Chemical Oxygen Demand	HACH8000
108.670	001	Nitrite	HACH8507
108.672	001	Phosphate, Ortho	HACH8048
108.675	001	Phosphorus, Total	HACH8190
Field of Testing:		109 - Toxic Chemical Elements of Wastewater	
109.010	001	Aluminum	EPA 200.7
109.010	002	Antimony	EPA 200.7
109.010	003	Arsenic	EPA 200.7
109.010	004	Barium	EPA 200.7
109.010	005	Beryllium	EPA 200.7
109.010	007	Cadmium	EPA 200.7
109.010	009	Chromium	EPA 200.7
109.010	010	Cobalt	EPA 200.7
109.010	011	Copper	EPA 200.7
109.010	012	Iron	EPA 200.7
109.010	013	Lead	EPA 200.7
109.010	015	Manganese	EPA 200.7
109.010	016	Molybdenum	EPA 200.7
109.010	017	Nickel	EPA 200.7
109.010	019	Selenium	EPA 200.7
109.010	021	Silver	EPA 200.7
109.010	023	Thallium	EPA 200.7
109.010	024	Tin	EPA 200.7
109.010	026	Vanadium	EPA 200.7
109.010	027	Zinc	EPA 200.7
109.051	001	Arsenic	EPA 206.3
109.161	001	Lead	EPA 239.2
109.190	001	Mercury	EPA 245.1
109.191	001	Mercury	EPA 245.2
109.280	001	Selenium	EPA 270.2
109.370	010	Lead	SM3111B
109.430	001	Aluminum	SM3120B
109.430	002	Antimony	SM3120B
109.430	003	Arsenic	SM3120B
109.430	004	Barium	SM3120B
109.430	005	Beryllium	SM3120B
109.430	007	Cadmium	SM3120B

109.430	009	Chromium	SM3120B
109.430	010	Cobalt	SM3120B
109.430	011	Copper	SM3120B
109.430	012	Iron	SM3120B
109.430	013	Lead	SM3120B
109.430	015	Manganese	SM3120B
109.430	016	Molybdenum	SM3120B
109.430	017	Nickel	SM3120B
109.430	019	Selenium	SM3120B
109.430	021	Silver	SM3120B
109.430	023	Thallium	SM3120B
109.430	024	Vanadium	SM3120B
109.430	025	Zinc	SM3120B

Field of Testing: 110 - Volatile Organic Chemistry of Wastewater

110.010	000	Halogenated Volatiles	EPA 601
110.020	000	Aromatic Volatiles	EPA 602
110.040	040	Halogenated Hydrocarbons	EPA 624
110.040	041	Aromatic Compounds	EPA 624
110.040	042	Oxygenates	EPA 624
110.040	043	Other Volatile Organics	EPA 624
110.060	040	Halogenated Hydrocarbons	SM6210B
110.060	041	Aromatic Compounds	SM6210B
110.060	042	Oxygenates	SM6210B
110.060	043	Other Volatile Organics	SM6210B

Field of Testing: 111 - Semi-volatile Organic Chemistry of Wastewater

111.101	030	Pesticides	EPA 625
111.101	031	PCBs	EPA 625
111.101	032	Polynuclear Aromatic Hydrocarbons	EPA 625
111.101	033	Adipates	EPA 625
111.101	034	Phthalates	EPA 625
111.101	035	Herbicides	EPA 625
111.101	036	Other Extractables	EPA 625
111.170	030	Organochlorine Pesticides	EPA 608
111.170	031	PCBs	EPA 608

Field of Testing: 114 - Inorganic Chemistry of Hazardous Waste

114.010	001	Antimony	EPA 6010B
114.010	002	Arsenic	EPA 6010B
114.010	003	Barium	EPA 6010B
114.010	004	Beryllium	EPA 6010B
114.010	005	Cadmium	EPA 6010B
114.010	006	Chromium	EPA 6010B
114.010	007	Cobalt	EPA 6010B
114.010	008	Copper	EPA 6010B
114.010	009	Lead	EPA 6010B
114.010	010	Molybdenum	EPA 6010B
114.010	011	Nickel	EPA 6010B
114.010	012	Selenium	EPA 6010B
114.010	013	Silver	EPA 6010B
114.010	014	Thallium	EPA 6010B
114.010	015	Vanadium	EPA 6010B
114.010	016	Zinc	EPA 6010B
114.040	001	Arsenic	EPA 7060A
114.103	001	Chromium (VI)	EPA 7196A

As of 02/03/2004 , this list supersedes all previous lists for this certificate number.
Customers: Please verify the current accreditation standing with the State.

114.106	001	Chromium (VI)	EPA 7199
114.130	001	Lead	EPA 7420
114.131	001	Lead	EPA 7421
114.140	001	Mercury	EPA 7470A
114.141	001	Mercury	EPA 7471A
114.170	001	Selenium	EPA 7740
114.222	001	Cyanide	EPA 9014
114.240	001	pH	EPA 9040
114.241	001	pH	EPA 9045
114.250	001	Fluoride	EPA 9056
114.270	001	Fluoride	EPA 9214
Field of Testing:		115 - Extraction Test of Hazardous Waste	
115.020	001	Toxicity Characteristic Leaching Procedure (TCLP)	EPA 1311
115.021	001	TCLP Inorganics	EPA 1311
115.022	001	TCLP Extractables	EPA 1311
115.030	001	Waste Extraction Test (WET)	CCR Chapter11, Article 5, Appendix II
115.040	001	Synthetic Precipitation Leaching Procedure (SPLP)	EPA 1312
Field of Testing:		116 - Volatile Organic Chemistry of Hazardous Waste	
116.020	030	Nonhalogenated Volatiles	EPA 8015B
116.020	031	Ethanol and Methanol	EPA 8015B
116.030	001	Gasoline-range Organics	EPA 8015B
116.040	041	Methyl tert-butyl Ether (MTBE)	EPA 8021B
116.040	060	Halogenated Volatiles	EPA 8021B
116.040	061	Aromatic Volatiles	EPA 8021B
116.040	062	BTEX	EPA 8021B
116.080	000	Volatile Organic Compounds	EPA 8260B
116.080	120	Oxygenates	EPA 8260B
116.100	001	Total Petroleum Hydrocarbons - Gasoline	LUFT GC/MS
116.100	010	BTEX and MTBE	LUFT GC/MS
116.110	001	Total Petroleum Hydrocarbons - Gasoline	LUFT
Field of Testing:		117 - Semi-volatile Organic Chemistry of Hazardous Waste	
117.010	001	Diesel-range Total Petroleum Hydrocarbons	EPA 8015B
117.015	001	Diesel-range Total Petroleum Hydrocarbons	LUFT GC/MS
117.016	001	Diesel-range Total Petroleum Hydrocarbons	LUFT
117.017	001	TRPH Screening	EPA 418.1
117.110	000	Extractable Organics	EPA 8270C
117.111	070	PCBs	EPA 8270C
117.111	071	Pesticides	EPA 8270C
117.111	072	Herbicides	EPA 8270C
117.210	000	Organochlorine Pesticides	EPA 8081A
117.220	000	PCBs	EPA 8082
Field of Testing:		120 - Physical Properties of Hazardous Waste	
120.010	001	Ignitability	EPA 1010
120.070	001	Corrosivity - pH Determination	EPA 9040B
120.080	001	Corrosivity - pH Determination	EPA 9045C