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September 10, 2001

REPLY TO
ATTENTION OF

Environment and Safety Directorate

SEP 2001
RECEIVED

Ms. Cheryl Frischkorn
State of New Mexico Environment Department - HWB
2905 Rodeo Park Drive East
Building 1
Santa Fe, New Mexico 87505

SUBJECT: Submittal of Report of the Spring 2001 Groundwater Sampling Event at the High Energy Laser Systems Test Facility Chromium Spill Site

Dear Ms. Frischkorn:

Two copies of the *Report of the Spring 2001 Groundwater Sampling Event at the High Energy Laser Systems Test Facility (HELSTF) Chromium Spill Site* dated August 2001, are enclosed for your information. An electronic copy of the report is also enclosed.

Groundwater at this site is monitored to determine whether chromium originating from the spill site is migrating to groundwater, and whether its concentration is increasing or decreasing over time. The groundwater is also monitored for a suite of analytes that includes VOCs, SVOCs, explosive residues, metals, and a specific set of water quality parameters to provide data for the on-going site-wide HELSTF groundwater investigation.

During the Spring 2001 groundwater sampling event, concentrations of chromium that exceeded the New Mexico Water Quality Control Commission standard of 0.05 mg/L were detected in four of the nine on-site monitoring wells. The highest concentration detected was 2.5 mg/L in HELSTF monitoring well (HMW) 41. Trends analyses show concentrations of chromium generally decreasing since 1998, with seasonal variations between spring and fall sampling events, where fall data generally returns higher values for chromium than spring data. The trends analyses are contained in Appendix A of the subject report.

Copies of this correspondence and the enclosure are also being furnished to Ms. Julie Jacobs, NMED DSMOA; Messrs. James Bearzi and John Kieling, NMED HWB; Mr. James Harris, Region VI EPA; Ms. Nancy Kosko, Developmental Test Command; Mr. Mark Melnyk, Staff Judge Advocate White Sands Missile Range; Mr. Lionel Brown, Space Missile Defense Command HELSTF; and to MEVATEC Corporation. Please contact Ms. Robin Paul of our office at (505) 678-2224 if you have any questions.

Sincerely,

Thomas A. Ladd

Thomas A. Ladd
Director, Environment and
Safety Directorate

Enclosure

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REPORT OF SPRING 2001 GROUNDWATER SAMPLING EVENT AT THE HIGH ENERGY LASER SYSTEMS TEST FACILITY (HELSTF) CHROMIUM SPILL SITE

Submitted to:

US Army
White Sands Missile Range
Directorate of Environment and Safety
White Sands Missile Range, New Mexico 88002-5048

August 2001

Submitted by:

MEVATEC Corporation
Building 126
White Sands Missile Range, New Mexico 88002

EXECUTIVE SUMMARY

The High Energy Laser Systems Test Facility (HELSTF) Chromium Spill Site is designated as WSMR-54 in the Defense Site Environmental Restoration Tracking System (DSERTS) and is located at HELSTF in Otero County, New Mexico. Chromium concentrations in the groundwater resulted from an accidental spill of Entec 300, a Cr (VI)-based corrosion inhibitor. Deionized water containing Cr (VI) was in use at the time as a corrosion inhibitor and was circulated through a closed loop coolant system of the high energy laser testing units. The Chromium Spill Site was originally discovered in 1990 during preparations to pave the site. Upon initial discovery, 17 drums of contaminated soil were excavated and disposed of.

The HELSTF Chromium Spill Site has been the subject of groundwater monitoring to monitor the concentration of contaminants in the groundwater. Samples are collected semiannually from nine on-site monitoring wells (HMW-11, HMW-13, HMW-36, HMW-37, HMW-38, HMW-39, HMW-40, HMW-41 and HMW-43) and are analyzed for a suite of analytes that includes volatile organic compounds (VOC), semi-volatile organic compounds (SVOC), metals, explosive residues, pesticides, herbicides, dissolved ions, petroleum hydrocarbons, and a specific set of water quality parameters. Before samples are collected, wells are purged and monitored for temperature, pH, conductivity and appearance. All data is recorded in a bound field logbook.

This report presents the Spring 2001 sampling event results. Based on this data, no concentrations of SVOCs, petroleum hydrocarbons, explosives, pesticides or herbicides were detected above New Mexico Water Quality Control Commission (NMWQCC) standards. Analysis of VOCs revealed concentrations that exceeded the standards for 1,2-dichloroethene in HMW-36 and trichloroethene in HMW-41. Analysis of metals revealed concentrations that exceeded the NMWQCC standards for boron in HMW-11, HMW-13, HMW-36, HMW-37, HMW-38, HMW-39, HMW-40, HMW-41 and HMW-43; Chromium in HMW-11, HMW-39, HMW-40 and HMW-41; Iron in HMW-11 and HMW-37; Manganese in HMW-36; Molybdenum in HMW-39 and HMW-40; Selenium in HMW-11, HMW-38, HMW-39, HMW-40 and HMW-41 and Silver in HMW-13. Analysis of water quality parameters revealed concentrations that exceeded the NMWQCC standards of sulfate in HMW-11, HMW-13, HMW-37, HMW-39, HMW-40, HMW-41 and HMW-43 and TDS in HMW-11, HMW-13, HMW-36, HMW-37, HMW-38, HMW-39, HMW-40, HMW-41 and HMW-43. Based on data from the Spring 2001 Sampling event, contaminants are present in the groundwater at the HELSTF Chromium Spill Site.

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LIST OF ABBREVIATIONS, ACRONYMS, AND SYMBOLS

°F	Degrees Fahrenheit
DSERTS	Defense Site Environmental Restoration Tracking System
ESE	Environmental Science Engineering
ft	feet
HELSTF	High Energy Laser Systems Test Facility
km	kilometers
m	meters
µg/L	micrograms per liter
m	meter
mg/L	milligrams per liter
mi	mile
µS/cm	microsiemens per centimeter
NAD83	North American Datum, 1983
NAVD88	North American Vertical Datum, 1988
NMWQCC	New Mexico Water Quality Control Commission
QA	quality assurance
QC	quality control
SVOC	Semi-volatile Organic Compounds
SWMU	Solid Waste Management Unit
TDS	Total Dissolve Solids
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compounds
WSMR	White Sands Missile Range

DRAFT
REPORT OF SPRING 2001 GROUNDWATER SAMPLING EVENT AT THE HIGH ENERGY LASER SYSTEMS TEST FACILITY (HELSTF) CHROMIUM SPILL SITE

1.0 INTRODUCTION

The High Energy Laser System Test Facility (HELSTF) Chromium Spill Site is located at HELSTF in the southeast portion of White Sands Missile Range as shown on Figure 1-1 and is designated WSMR-54 in the Defense Site Environmental Restoration Tracking System (DESERTS) and Solid Waste Management Unit (SWMU)-143 in the Resource Conservation and Recovery Act (RCRA) Part B Permit Corrective Action Module VIII. Nine on-site monitoring wells are sampled semiannually to monitor concentrations of contaminants in the groundwater as a part of the Installation Restoration Program. Chromium concentrations in the groundwater resulted from an accidental spill of Entec 300, a hexavalent chromium corrosion inhibitor. The Chromium Spill Site was discovered in 1990 during preparations to pave the site.

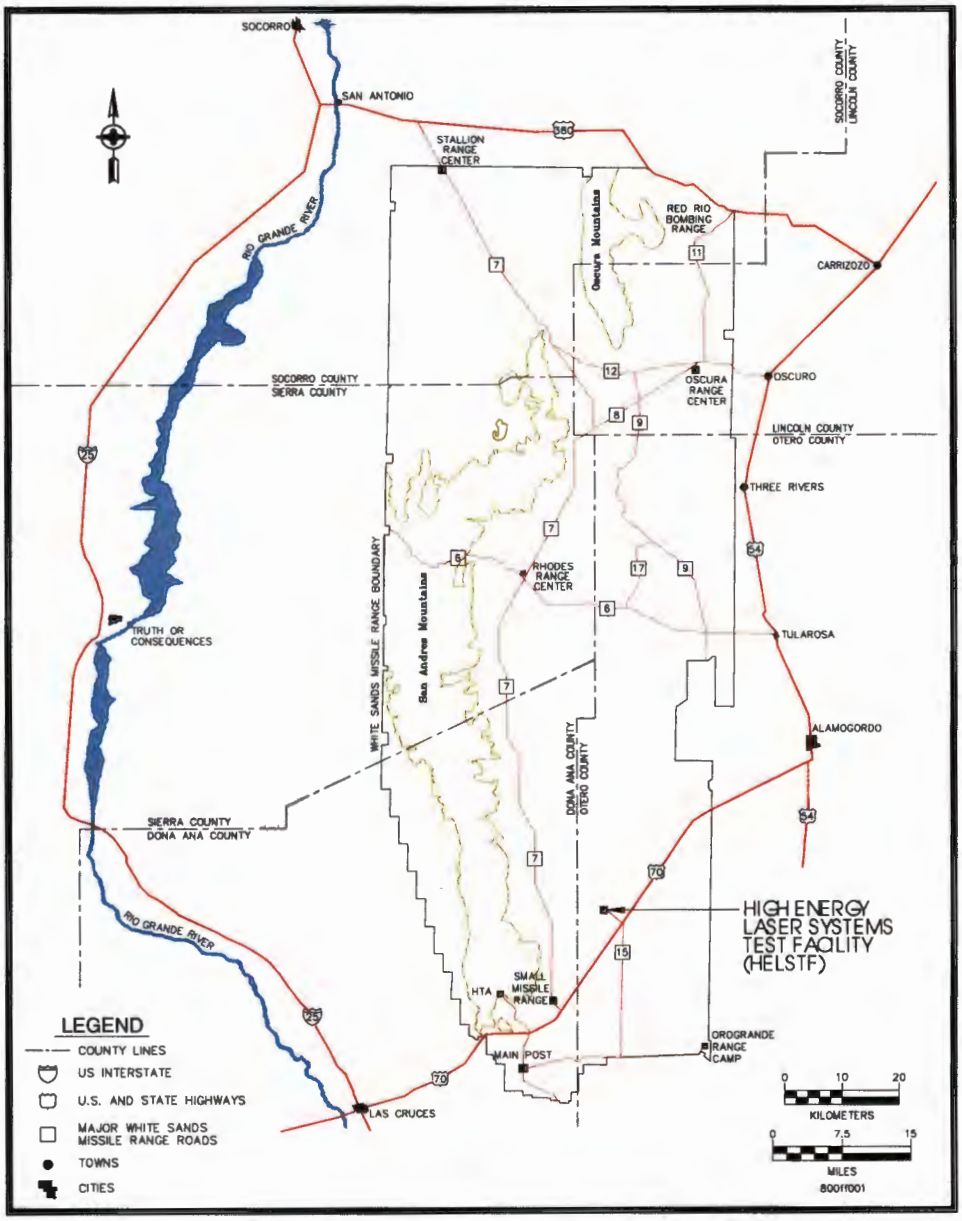


Figure 1-1. HELSTF Chromium Spill Site Site Location Map.

The HELSTF Chromium Spill Site has been subjected to groundwater monitoring to monitor the concentrations of contaminants in the groundwater. Sample event data graphed as a function of time is included in Appendix A. Samples are collected semiannually from nine on-site monitoring wells (HMW-11, HMW-13, HMW-36, HMW-37, HMW-38, HMW-39, HMW-40, HMW-41 and HMW-43, shown on Figure 1-2) and are analyzed for a suite of analytes that includes volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, explosive residues, pesticides, herbicides, dissolved ions and petroleum hydrocarbons. Analytical results of the samples are compared to New Mexico Water Quality Control Commission (NMWQCC) standards. Before samples are collected, the nine on-site wells are purged and monitored for temperature, pH, conductivity and appearance. All data is recorded in a bound field logbook.

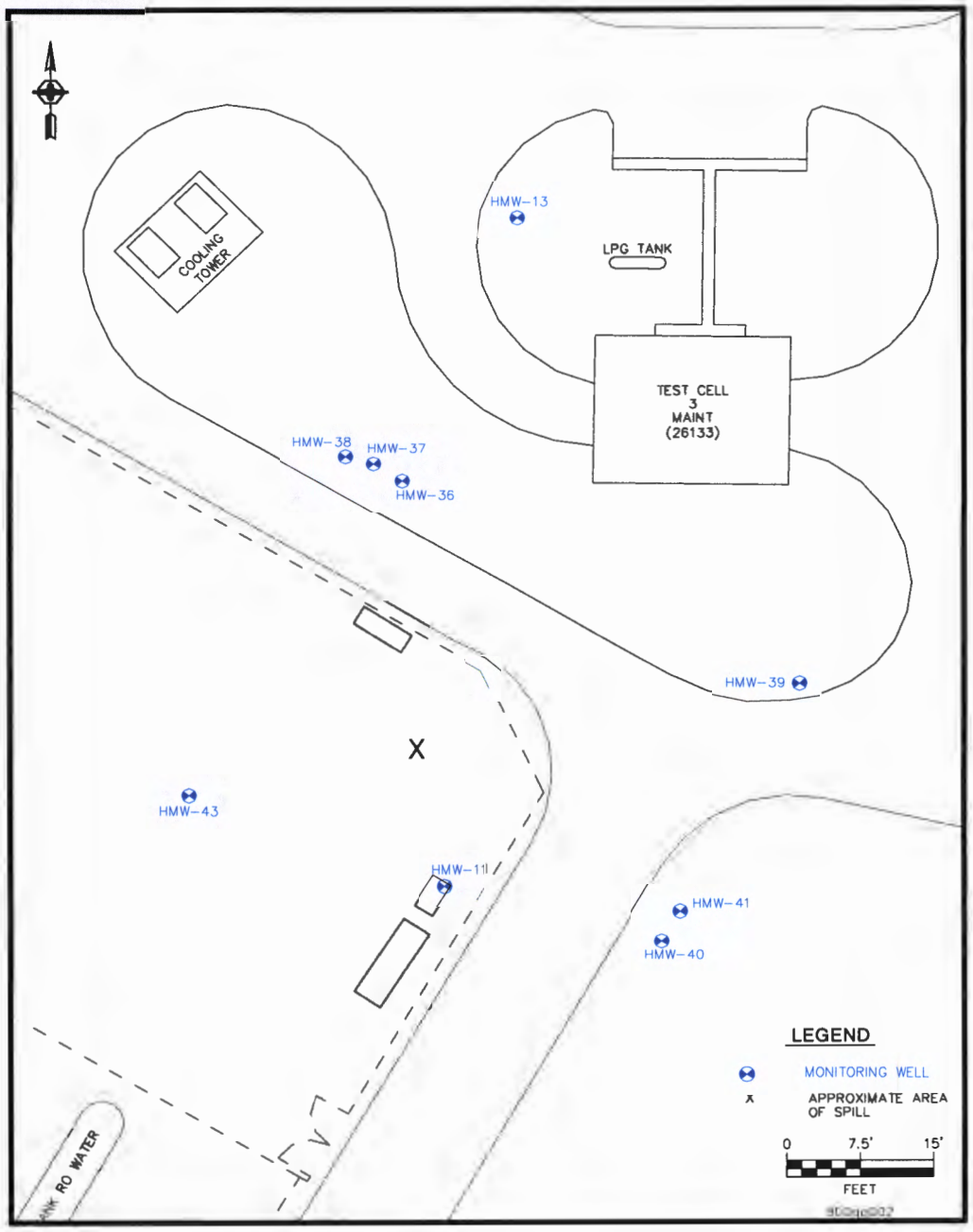


Figure 1-2. HELSTF Chromium Spill Site Site Diagram.

1.1 Site Description

The HELSTF Chromium Spill Site is located inside HELSTF south of Test Cell 3 and north of the Sewage Lagoons. The site is graded and leveled with a well-sorted gravel cover and an asphalt cap. The low relief topography of the site is shown on Figure 1-3.

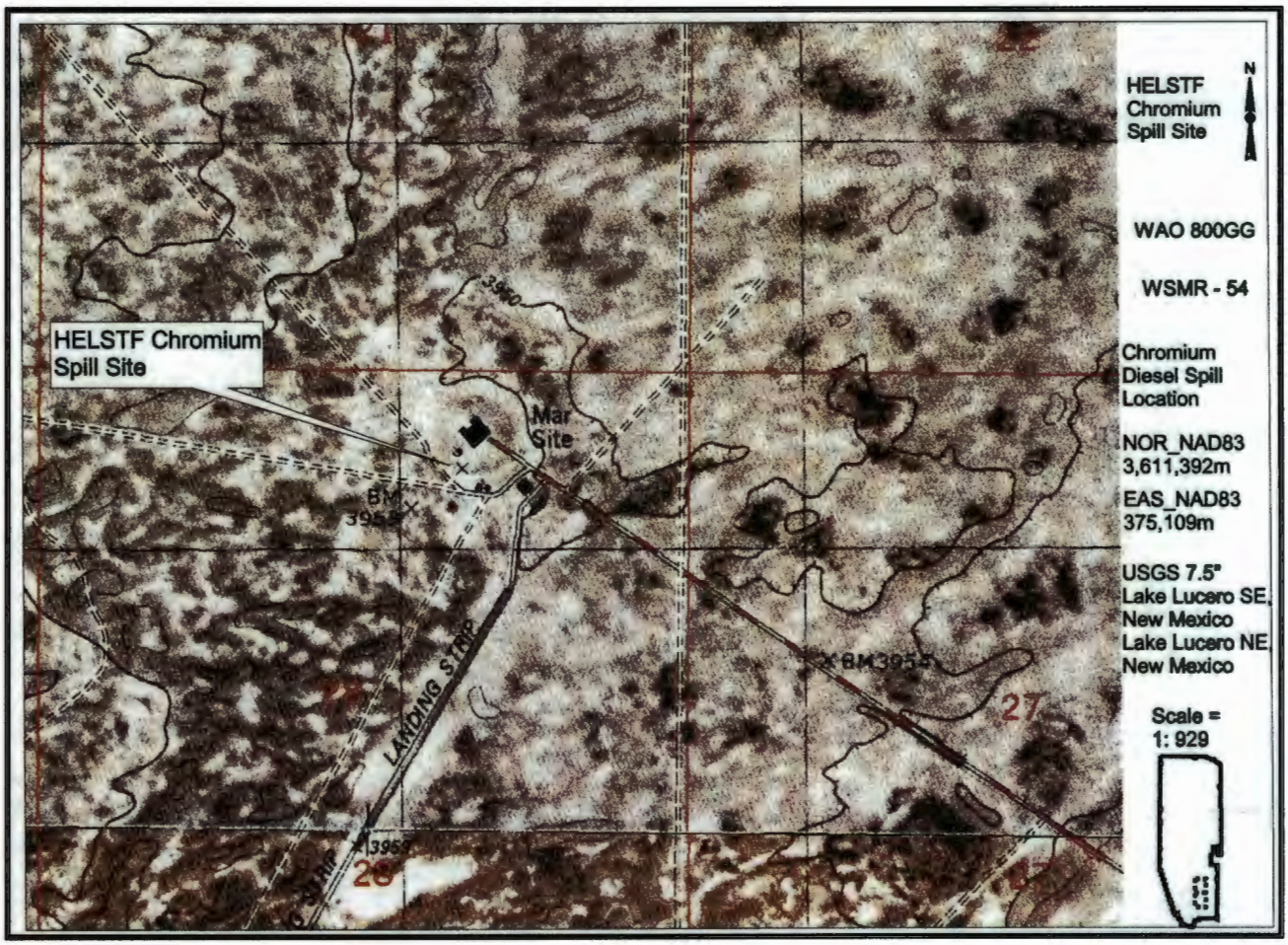


Figure 1-3. HELSTF Chromium Spill Site USGS Topographic Map.

1.2 Hydrogeology

Subsurface geologic conditions at the HELSTF Diesel Spill Site were characterized from stratigraphic descriptions logged during drilling activities. The deposits are characterized by thickly bedded clay with numerous, intermittent, thinly-bedded units of Quaternary/Tertiary-aged sandy silt, sand, gravelly-sand, and gravel originating from the San Andres Mountains, west of the landfill site.

High TDS concentrations are naturally occurring at this location in the Tularosa Basin. The Tularosa Basin is a closed basin, which does not permit the water to exit the region. Rainwater and snowmelt run off the mountains towards the center of the basin. Natural transportation of the water across the surface and infiltration through the soil dissolves the feldspars from the

granitic formations in the mountains as well as the gypsum and other salt based soils in the basin. This process causes the high concentrations of sulfates, calcium, chlorides, magnesium, potassium, and sodium in groundwater samples.

The elevated concentrations of boron found in the groundwater are likely naturally occurring. Borate minerals form chiefly in arid to semi-arid environments, are of a sedimentary origin, and are generally deposited in playas from the evaporation of and precipitation from saline surface waters. Borates are readily soluble in water and tend to percolate through the soil adding boron to the groundwater of this region.

Selenium is another naturally occurring mineral found in the groundwater. The presence of selenium in the soil and groundwater is likely due to the erosion of volcanic derived rocks present in this region. Selenium, when present in alkaline soils, commonly oxidizes to the mineral selenate. Selenate, like boron, is highly soluble in water and percolates to the groundwater.

2.0 GROUNDWATER MONITORING

For each monitoring well sampled, representatives record the date, personnel on-site, significant times, well number, air temperature, relative humidity and general weather conditions in a field log book. A purge volume is calculated for each well by obtaining depth to water, total well depth and well casing diameter. During purging, the well is monitored for temperature, pH, conductivity and appearance, which are recorded by time and volume of water purged.

Each sample is collected in new certified clean containers for laboratory chemical analysis of a suite of analytes that includes VOCs, SVOCs, metals, explosive residues, cyanide, dissolved ions, petroleum hydrocarbons, and a specific set of water quality parameters. An analyte list is included as Table 2-1 on the following page.

Following sampling any equipment that has come into contact with the groundwater is decontaminated using an Alconox/water solution and a water rinsate. All purge and decontamination water is containerized for analysis and proper off-site disposal. A complete description of standard operating procedures used to acquire field measurements and collect groundwater samples are included as Appendix B. A copy of the drum log and disposal manifest is included as Appendix C.

3.0 REGULATORY CRITERIA

All laboratory analytical results are compared to NMWQCC standards for groundwater.

4.0 GROUNDWATER MONITORING RESULTS

The monitoring wells at the HELSTF Chromium Spill Site were monitored on January 29, 30 and 31, 2001. Each monitoring well was monitored in accordance with established protocols described in Section 2.0. Well location and construction data is listed in Table 4-1.

Table 2-1. HELSTF Chromium Spill Site Analyte List.

Parameter		Reference Method	Method Type
CO_3^{-2} & HCO_3^- Alkalinity		EPA 310.1	Titrimetric
PH		EPA 150.1	Electrometric
Conductance		EPA 120.1	Conductivity Meter
TDS		EPA 160.1	Gravimetric
Chloride		EPA 300.0	Ion Chromotography
Fluoride			
Sulfate			
Nitrate (NO_3)			
Nitrite (NO_2)			
Bromide			
Ammonium Perchlorate		EPA 314.0	Ion Chromotography
Nutrients			
Ammonia(NH_3+NH_4)		EPA 350.1	Colorimetric
TKN		EPA 351.2	Colorimetric
Total Phosphorous		EPA 365.1	Colorimetric
Aluminum	Manganese		ICP/AES unless noted
Arsenic****	Molybdenum	SW846 7060A****	AA-GF****
Barium	Nickel		
Beryllium	Selenium***		
Boron	Silicon		
Cadmium	Silver	SW846 7740***	
Calcium	Strontium		
Chromium	Tin		
Cobalt	Vanadium		
Copper	Zinc	SW846 7421**	AA-GF**
Iron			
Lead **			
Magnesium			
Mercury#		SW846-7470	Cold Vapor-AA
Chromium $^{6+}$*		SW846 7196A*	Spectrophotometer*
Aluminum	Manganese	SW846 7060A****	ICP/AES unless noted
Arsenic****	Molybdenum		
Barium	Nickel		
Beryllium	Potassium		
Boron	Selenium	SW846 7740***	
Cadmium	Silicon		
Calcium	Silver		
Chromium	Sodium		
Cobalt	Strontium	SW846 7421**	AA-GF****
Copper	Tin		
Iron	Vanadium		
Lead **	Zinc		
Lithium			
Magnesium			
VOC's		SW846 8260A	GC/MS
SVOC's		SW846 8270	GC/MS
Pesticides		SW846 8081	GC
Herbicides		SW846 8151	GC
Explosives		SW846-8330	HPLC
Petroleum Hydrocarbons		EPA 8015 (mod) DRO	GC
TOC		SW846-9060	TOC analyzer

Notes:
EPA – Environmental Protection Agency
mg/L – milligrams per liter equivalent to parts per million
μg/L – micrograms per liter parts per billion
TOC – Total Organic Carbon
GC – Gas Chromatography

Table 4-1. Well Location and Construction Data.

Well No.	Northing[1]	Easting[1]	Elevation[2] Brass Marker-ft (m)	Elevation[2] Top of PVC-ft (m)	Total Well Depth – ft (m)	Screen Interval-ft (m)
HMW-11	3611299.870	375081.008	3954.16 (1205.23)	3955.51 (1205.64)	64.0 (19.5)	47.0-62.0 (14.3-18.9)
HMW-13	3611371.793	375088.433	3954.95 (1205.47)	3956.27 (1205.87)	47.0 (14.3)	32.0-42.0 (9.8-12.8)
HMW-36	3611343.350	375076.553	3953.45 (1205.01)	3955.92 (1205.76)	21.0 (6.4)	11.0-12.0 (3.4-6.4)
HMW-37	3611345.186	375073.602	3953.75 (1205.10)	3956.31 (1205.88)	42.0 (12.8)	27.0-42.0 (8.2-12.8)
HMW-38	3611345.943	375070.721	3954.08 (1205.20)	3956.52 (1205.95)	62.0 (18.90)	52.0-62.0 (15.8-18.9)
HMW-39	3611321.580	375117.437	3952.90 (1204.84)	3955.60 (1205.67)	62.0 (18.90)	52.0-62.0 (15.8-18.9)
HMW-40	3611293.981	375103.474	3951.54 (1204.43)	3953.85 (1205.13)	38.0 (11.6)	28.0-38.0 (8.5-11.6)
HMW-41	3611297.156	37501.341	3951.53 (1204.43)	3953.89 (1205.15)	59.0 (18.0)	49.0-59.0 (14.9-18.0)
HMW-43	3611309.551	375054.699	3954.57 (1205.35)	3957.22 (1206.16)	62.5 (19.1)	52.5-62.5 (16.0-19.1)

Notes: 1. Universal Transverse Mercator (UTM) Coordinate Systems, Zone 13, North American Datum 1983 (NAD83)
2. Elevations are based on North American Vertical Datum, 1988 (NAVD88)
PVC – Plolyvinyl Chloride m – meters ft – feet

Prior to sampling, depth to water is measured and the wells are purged and monitored for temperature, pH, conductivity and physical characteristics (clarity, color and odor). Water quality measurements collected during purging are listed in Table 4-2. The water quality measurements fluctuate on a seasonal basis or affected by the artificial recharge areas for the HELSTF perched water-bearing zones.

Table 4-2. Field Water Quality Measurements HELSTF Chromium Spill Site Spring 2001 Sampling Event.

Well No.	Date Sampled	Temperature °F (°C)	PH	Conductivity µS/cm	Depth to Water ft (m)	Groundwater Elevations ft (m)	Comments
HMW-11	1/29/01	64.3 (17.9)	7.51	Off Scale	46.04 (14.03)	3908.12 (1191.19)	Cloudy
HMW-13	1/29/01	60.7 (15.9)	7.73	4,010	37.97 (11.57)	3916.98 (1193.90)	Clear
HMW-36	1/31/01	60.8 (16.0)	6.75	8,670	18.8 (5.73)	3934.65 (1199.28)	Clear
HMW-37	1/30/01	57.3 (14.1)	7.43	3,880	35.94 (10.95)	3917.81 (1194.15)	Murky
HMW-38	1/30/01	59.1 (15.1)	7.44	16,830	41.92 (12.78)	3912.16 (1192.43)	Clear
HMW-39	1/31/01	61.5 (16.4)	6.86	Off Scale	41.49 (12.65)	3911.41 (1192.20)	Clear
HMW-40	1/31/01	52.3 (11.3)	7.62	19,570	18.55 (5.65)	3932.99 (1198.78)	Murky
HMW-41	1/31/01	51.2 (10.7)	7.41	12,890	40.10 (12.22)	3913.79 (1192.92)	Murky-Yellow
HMW-43	1/29/01	63.2 (17.3)	7.70	9,880	39.05 (11.90)	3911.43 (1192.20)	Clear

Notes: ft = feet m = meters °F – Degrees Fahrenheit °C – Degrees Celsius µS/cm – microsiemens per centimeter

Based on the depth to water measurements, a groundwater flow direction can be calculated. Monitoring wells HMW-13, HMW-41 and HMW-43 were used in a three-point problem to calculate groundwater flow direction because they surround the approximate area of the spill, they all have similar construction details and they are all within the lower perched water-bearing zone.

The groundwater flow direction has been calculated to the southeast and is shown on Figure 4-1. The groundwater flow direction has remained fairly consistent indicating no gradient changes.

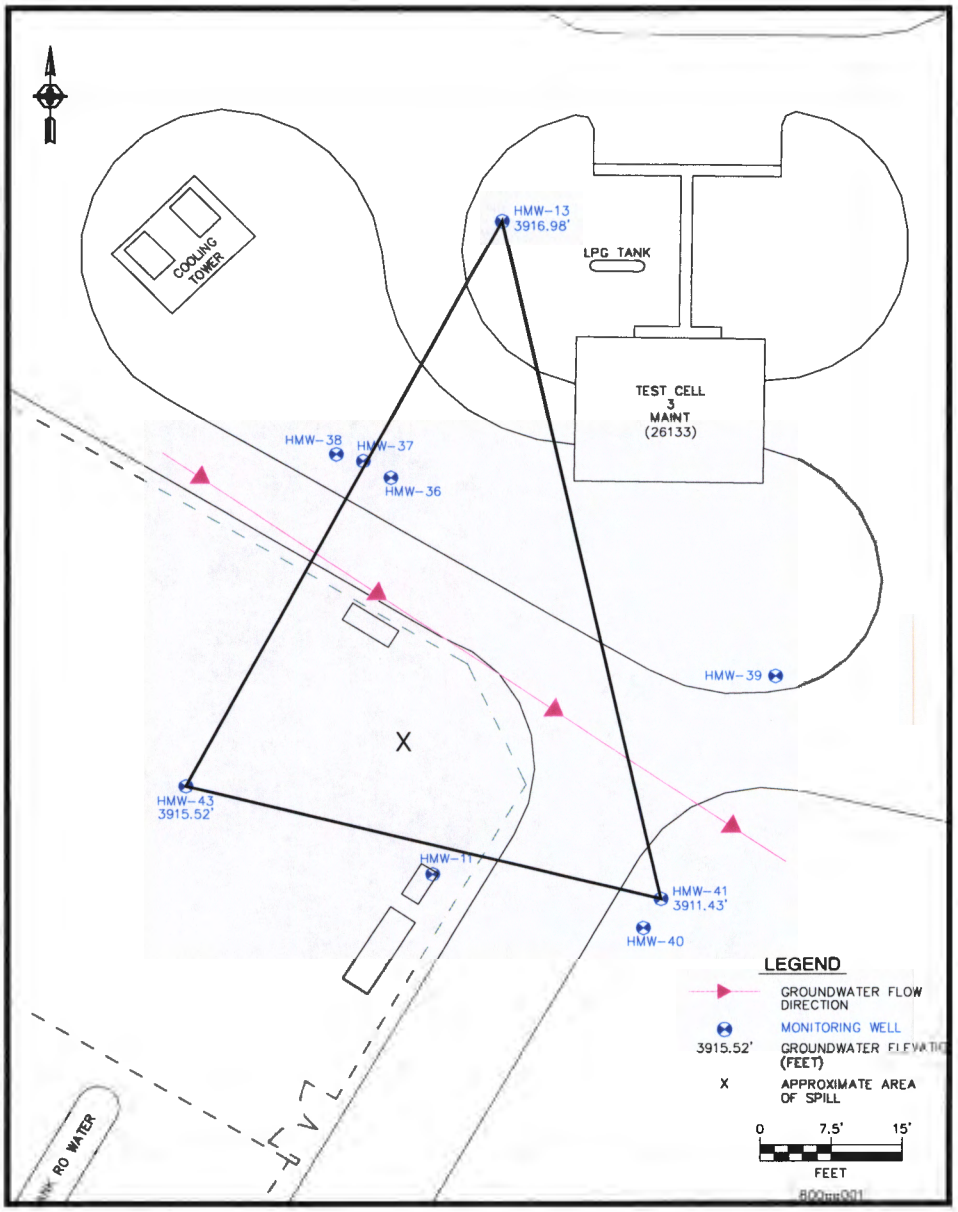


Figure 4-1. Groundwater Flow Direction.

5.0 GROUNDWATER CHEMICAL ANALYTICAL DATA

The monitoring wells at the HELSTF Chromium Spill Site were sampled on January 29, 30 and 31, 2001. Each monitoring well was sampled in accordance with established protocols described in Section 2.0. Primary samples were collected from all wells. Separate samples volumes were collected for quality assurance (QA) analysis from HMW-13 and HMW-39.

Concentrations of detected analytes are presented in Table 5-1 on page 10. The complete set of analytical results for the sampling event is presented in Appendix D.

Table 5-1. HELSTF Chromium Spill Site Detected Analytes.

METHOD	ANALYTE	UNIT	NMWQCC STD.	HMW-11	HMW-13	HMW-13 QC	HMW-36	HMW-37	HMW-38	HMW-39	HMW-39 QC	HMW-40	HMW-41	HMW-43
	VOC'S													
EPA 8260B	1,1-Dichloroethene	µg/L	5	1.09	ND	ND	ND	ND	ND	2.22	2.28	ND	ND	ND
EPA 8260B	1,1-Dichloroethane	µg/L	25	2.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EPA 8260B	Chloroform	µg/L	100	1.61	1.89	2.28	1.29	1.29	ND	2.32	2.27	ND	ND	ND
EPA 8260B	1,2-Dichloroethane	µg/L	10	ND	ND	ND	**12.9**	ND	ND	ND	ND	ND	ND	ND
EPA 8260B	Trichloroethene	µg/L	100	53.0	ND	ND	ND	ND	12.8	76.7	77.7	ND	**318**	ND
EPA 8260B	Isopropylbenzene	µg/L	NE	ND	ND	ND	2.67	ND	ND	ND	ND	ND	ND	ND
EPA 8260B	Sec-Butylbenzene	µg/L	NE	ND	ND	ND	2.35	ND	ND	ND	ND	ND	ND	ND
EPA 8260B	Naphthalene	µg/L	30	ND	ND	ND	6.8	ND	ND	ND	ND	ND	ND	ND
	DRO													
8015B	Gasoline Range Organics	mg/L	NE	ND	ND	ND	0.844	ND	ND	ND	ND	0.495	0.687	ND
	METALS													
EPA 6010B	Aluminum	mg/L	5	1.3	ND	0.94	ND	1	ND	ND	ND	ND	1	ND
EPA 6010B	Antimony	mg/L	0.006 (MCL)	ND	ND	ND	ND	0.014	ND	ND	ND	ND	ND	ND
EPA 6020	Arsenic	mg/L	0.1	0.031	0.013	0.015	0.012	ND	0.03	0.036	0.034	0.045	0.037	0.016
EPA 6020B	Boron	mg/L	0.75	**5**	**3.7**	**3.9**	**9.5**	**4.9**	**7.8**	**5.4**	**5.5**	**6**	**2.8**	**7.8**
EPA 6010B	Calcium	mg/L	NE	0.36	0.38	0.4	0.46	0.39	0.33	0.39	0.4	0.47	0.51	0.4
EPA 6010B	Chromium	mg/L	0.05	**0.35**	ND	ND	ND	ND	ND	**0.44**	**0.43**	**0.061**	**2.5**	ND
EPA 6010B	Copper	mg/L	1.3 (MCL)	ND	ND	0.14	ND	0.49	ND	0.14	ND	ND	ND	ND
EPA 6010B	Iron	mg/L	1	**1.4**	0.44	**1.2**	0.35	**1.5**	ND	0.26	ND	0.42	0.89	ND
EPA 6010B	Magnesium	mg/L	NE	0.89	0.34	0.35	0.58	0.4	0.71	0.98	1	1.9	1.3	0.37
EPA 6010B	Manganese	mg/L	0.2	0.113	0.067	0.098	**0.415**	0.066	0.057	0.062	0.064	0.098	0.087	ND
EPA 200.8	Molybdenum	mg/L	1	0.61	0.28	0.28	0.25	0.29	0.97	**1.2**	**1.2**	**2**	0.33	0.54
EPA 7740	Selenium	mg/L	0.05	**0.13**	ND	ND	ND	ND	**0.1**	**0.12**	**0.13**	**0.33**	**0.23**	ND
EPA 200.8	Silicon	mg/L	NE	0.0266	0.0169	0.0186	0.0148	0.0203	0.0208	0.0213	0.0215	0.0118	0.0247	0.0207
EPA 6010B	Silver	mg/L	0.05	ND	**0.11**	ND	ND	ND	ND	ND	ND	ND	ND	ND
EPA 6020	Strontium	mg/L	17 (HA)	8.1	7.9	7.5	10	8.4	6.6	9.3	9.7	12	11	5.5
EPA 7871	Zinc	mg/L	10	ND	ND	0.15	ND	0.48	0.073	0.18	ND	ND	0.067	ND

Table 5-1. HELSTF Chromium Spill Site Detected Analytes.
(concluded)

METHOD	ANALYTE	UNIT	NMWQCC STD.	HMW-11	HMW-13	HMW-13 QC	HMW-36	HMW-37	HMW-38	HMW-39	HMW-39 QC	HMW-40	HMW-41	HMW-43
	GENERAL CHEMISTRY													
SM 2320B	Total Alkalinity	mg/L	NE	100	120	120	710	130	160	200	720	130	220	190
SM 2320B	Bicarbonate Alkalinity	mg/L	NE	100	120	120	710	130	160	200	720	130	220	190
EPA 353.3	Nitrate/Nitrite as Nitrogen	mg/L	10 (MCL)	120/ND	23/ND	20/ND	11/ND	25/ND	ND	170/ND	66/ND	280/ND	190/ND	20/ND
EPA 300.0	Sulfate	mg/L	600	**10,000**	**34,000**	**3,400**	470	**4,000**	ND	**8,500**	**9,400**	**17,000**	**16,000**	**5,000**
EPA 300.0	Total Dissolved Solids	mg/L	1,000	**18,000**	**6,200**	**6,500**	**9,500**	**6,400**	**16,000**	**22,000**	**22,000**	**42,000**	**23,000**	**9,100**
EPA 9060	Total Organic Carbon	mg/L	NE	2.93	2.9	1.64	8.85	1.55	2.76	4.97	5.01	5.33	2.73	2.55
EPA 300.0	Chloride	mg/L	NE	350	380	360	210	410	ND	4,000	3,900	10,000	9,800	530
EPA 300.0	Fluoride	mg/L	NE	ND	4.2	3.9	5.9	4.5	ND	6.6	3.8	12	3.6	4.2
EPA 150.1	pH	NE	6.0-9.0	7.59	7.74	7.78	7.46	7.71	7.74	7.53	7.53	7.69	7.46	7.67
EPA 120.1	Specific Conductivity	umhos/cm	NE	19,000	6,300	6,400	9,700	6,400	16,000	23,000	12,300	42,000	24,000	8,900

Notes:

mg/L milligrams per liter equivalent to parts per million
µg/L micrograms per liter equivalent to parts per billion
NE No NMWQCC, EPA MCL, or EPA HA standard established
ND Analyte was not detected above reporting limits
NA Anayte was no analyzed
MCL EPA MCL standard
HA EPA HA standard
NMWQCC STD. New Mexico Water Quality Control Commission Standard
Bold analyte exceeds the NMWQCC standard

Analysis of VOCs revealed concentrations of 1,2-dichloroethane in HMW-36 of 12.9 μg/L, which exceeds the NMWQCC standard of 10 μg/L. Analysis revealed concentrations of trichloroethene in HMW-41 of 318 μg/L, which exceeds the NMWQCC standard of 100 μg/L.

Analysis of metals revealed respective concentrations of boron in HMW-11, HMW-13, HMW-36, HMW-37, HMW-38, HMW-39, HMW-40, HMW-41 and HMW-43 of 5 mg/L, 3.7 mg/L, 9.5 mg/L, 4.9 mg/L, 7.8 mg/L, 5.4 mg/L, 6 mg/L, 2.8 mg/L and 7.8 mg/L, which exceed the NMWQCC standard of 0.75 mg/L. Analysis revealed respective concentrations of chromium in HMW-11, HMW-39 HMW-40 and HMW-41 of 0.35 mg/L, 0.44 mg/L, 0.061 mg/L and 2.5 mg/L, which exceed the NMWQCC standard of 0.05 mg/L. Analysis revealed respective concentrations of iron in HMW-11 and HMW-37 of 1.4 mg/L and 1.5 mg/L, which exceed the NMWQCC standard of 1 mg/L. Analysis revealed concentrations of manganese in HMW-36 of 0.415 mg/L, which exceeds the NMWQCC standard of 0.2 mg/L. Analysis revealed respective concentrations of molybdenum in HMW-39 and HMW-40 of 1.2 mg/L and 2 mg/L, which exceed the NMWQCC standard of 1 mg/L. Analysis revealed respective concentrations of selenium in HMW-11, HMW-38, HMW-39, HMW-40 and HMW-41 of 0.13 mg/L, 0.1 mg/L, 0.12 mg/L, 0.33 mg/L and 0.23 mg/L, which exceed the NMWQCC standard of 0.05 mg/L. Analysis revealed concentrations of silver in HMW-13 of 0.11 mg/L, which exceeds the NMWQCC standard of 0.05 mg/L.

Analysis of general chemistry revealed respective concentrations of sulfate in HMW-11, HMW-13, HMW-37, HMW-39, HMW-40, HMW-41 and HMW-43 of10,000 mg/L, 34,000 mg/L, 4,000 mg/L, 8,500 mg/L, 17,000 mg/L, 16,000 mg/L and 5,000 mg/L, which exceed the NMWQCC standard of 600 mg/L. Analysis revealed respective concentrations of TDS in HMW-11, HMW-13, HMW-36, HMW-37, HMW-38, HMW-39, HMW-40, HMW-41 and HMW-43 of 18,000mg/L, 6,200 mg/L, 9,500 mg/L, 6,400 mg/L, 16,000 mg/L, 22,000 mg/L, 42,000 mg/L, 23,000 mg/L and 9,100 mg/L, which exceed the NMWQCC standard of 1,000 mg/L.

6.0 SUMMARY

Groundwater at the HELSTF Chromium Spill Site is monitored for a suite of analytes that includes VOCs, SVOCs, metals, explosive residues, pesticides, herbicides, dissolved ions, petroleum hydrocarbons, and a specific set of water quality parameters. Monitoring at the location is conducted semiannually to monitor the concentrations of contaminants in the groundwater. Samples were collected from nine on-site monitoring wells and separate sample volumes were collected for performance of QC analysis during the sampling event. No concentrations of SVOCs, petroleum hydrocarbons, explosives, pesticides or herbicides were detected above NMWQCC standards.

Analysis of VOCs revealed concentrations that exceeded the NMWQCC standards for 1,2-dichloroethene in HMW-36 and trichloroethene in HMW-41.

Analysis of metals revealed concentrations that exceeded the NMWQCC standards for boron in HMW-11, HMW-13, HMW-36, HMW-37, HMW-38, HMW-39, HMW-40, HMW-41 and HMW-43; Chromium in HMW-11, HMW-39, HMW-40 and HMW-41; Iron in HMW-11 and

HMW-37; Manganese in HMW-36; Molybdenum in HMW-39 and HMW-40; Selenium in HMW-11, HMW-38, HMW-39, HMW-40 and HMW-41 and silver in HMW-13.

Analysis of water quality parameters revealed concentrations that exceeded the NMWQCC standards of sulfate in HMW-11, HMW-13, HMW-37, HMW-39, HMW-40, HMW-41 and HMW-43 and TDS in HMW-11, HMW-13, HMW-36, HMW-37, HMW-38, HMW-39, HMW-40, HMW-41 and HMW-43.

Based on data from the Spring 2001 sampling event, contaminants are present in the groundwater at the HELSTF Chromium Spill.

REFERENCES

MEVATEC Corporation, February 2001, Installation Action Plan, February 2001, Draft.

NMED-Hazardous and Radioactive Materials Bureau, 1998. *Position Paper, Section III.B.2.b, Page 1.*

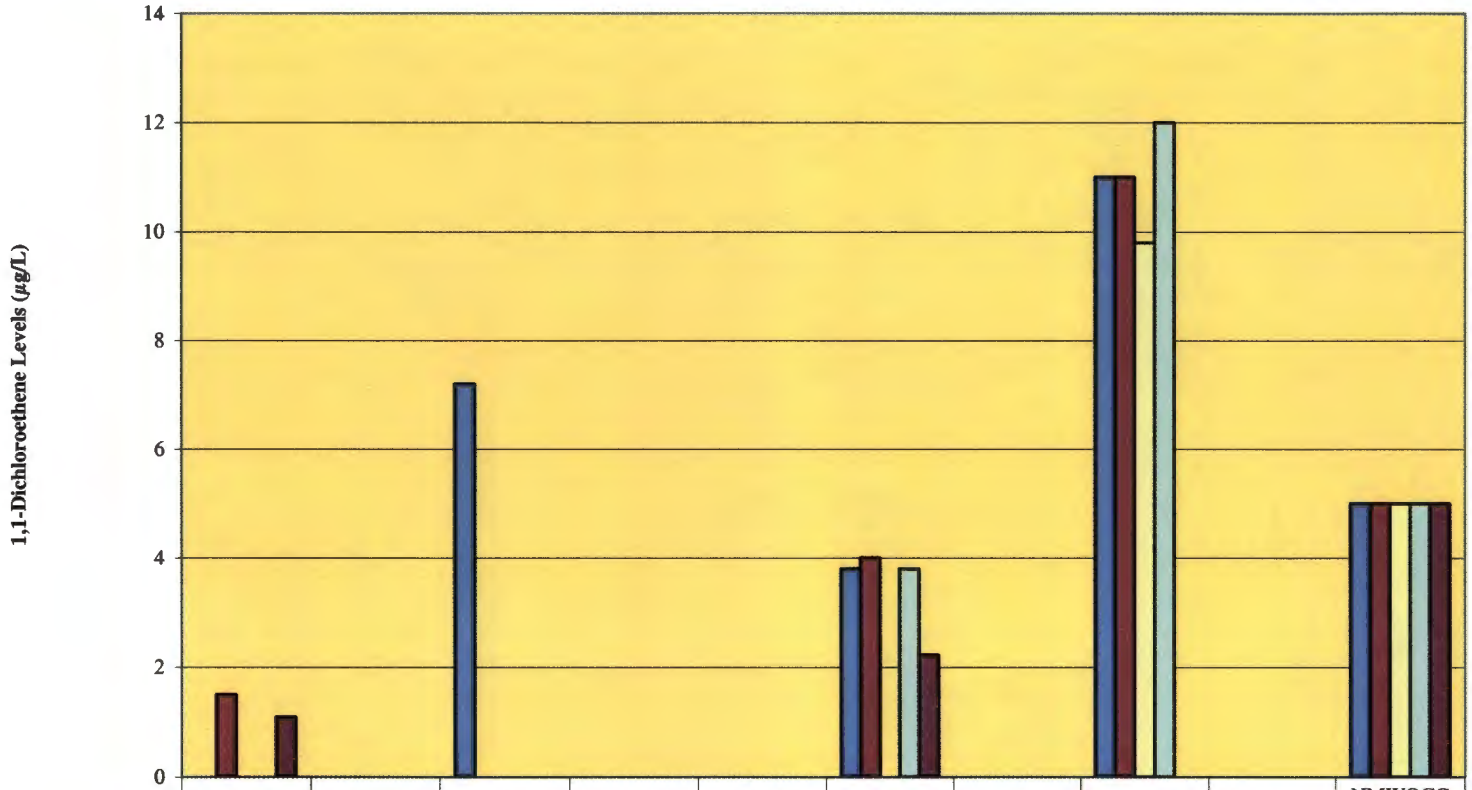
New Mexico Water Quality Control Commission, 1996. New Mexico Water Quality Control Commission Regulations.

U.S. Environmental Protection Agency, May 1995. *Drinking Water Regulations and Health Advisories.*

APPENDIX A

GRAPHS OF ANALYTICAL RESULT TRENDS

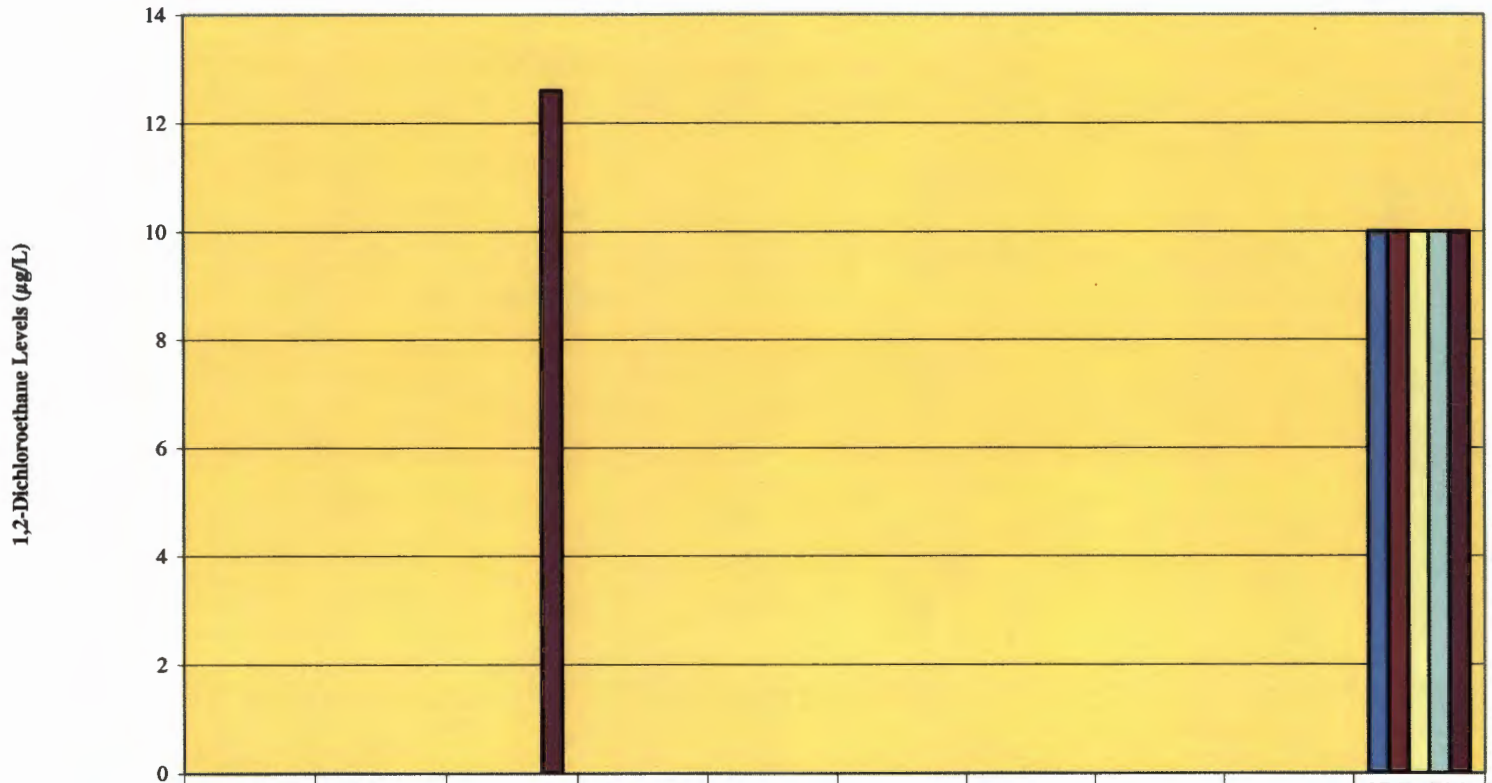
HELSTF Chromium Spill Site
Groundwater Sampling Results for 1,1-Dichloroethene



	HMW-11	HMW-13	HMW-36	HMW-37	HMW-38	HMW-39	HMW-40	HMW-41	HMW-43	NMWQCC Standard
Fall 1998	0	0	7.2	0	0	3.8	0	11	0	5
Spring 1999	1.5	0	0	0	0	4	0	11	0	5
Spring 2000	0	0	0	0	0	0	0	9.8	0	5
Fall 2000	0	0	0	0	0	3.8	0	12	0	5
Spring 2001	1.09	0	0	0	0	2.22	0	0	0	5

Well Name

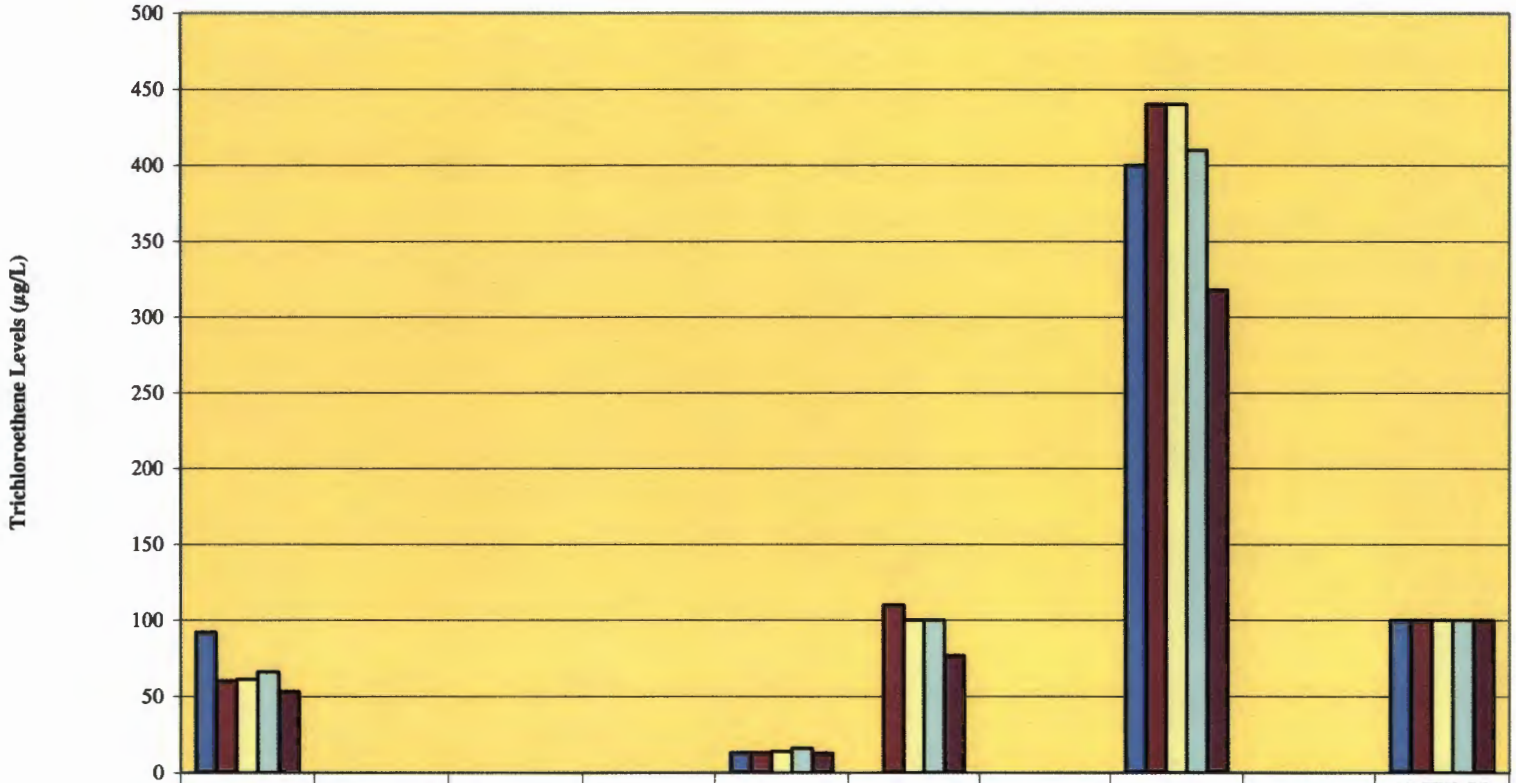
HELSTF Chromium Spill Site
Groundwater Sampling Results for 1,2-Dichloroethane



	HMW-11	HMW-13	HMW-36	HMW-37	HMW-38	HMW-39	HMW-40	HMW-41	HMW-43	NMWQCC Standard
Fall 1998	0	0	0	0	0	0	0	0	0	10
Spring 1999	0	0	0	0	0	0	0	0	0	10
Spring 2000	0	0	0	0	0	0	0	0	0	10
Fall 2000	0	0	0	0	0	0	0	0	0	10
Spring 2001	0	0	12.6	0	0	0	0	0	0	10

Well Name

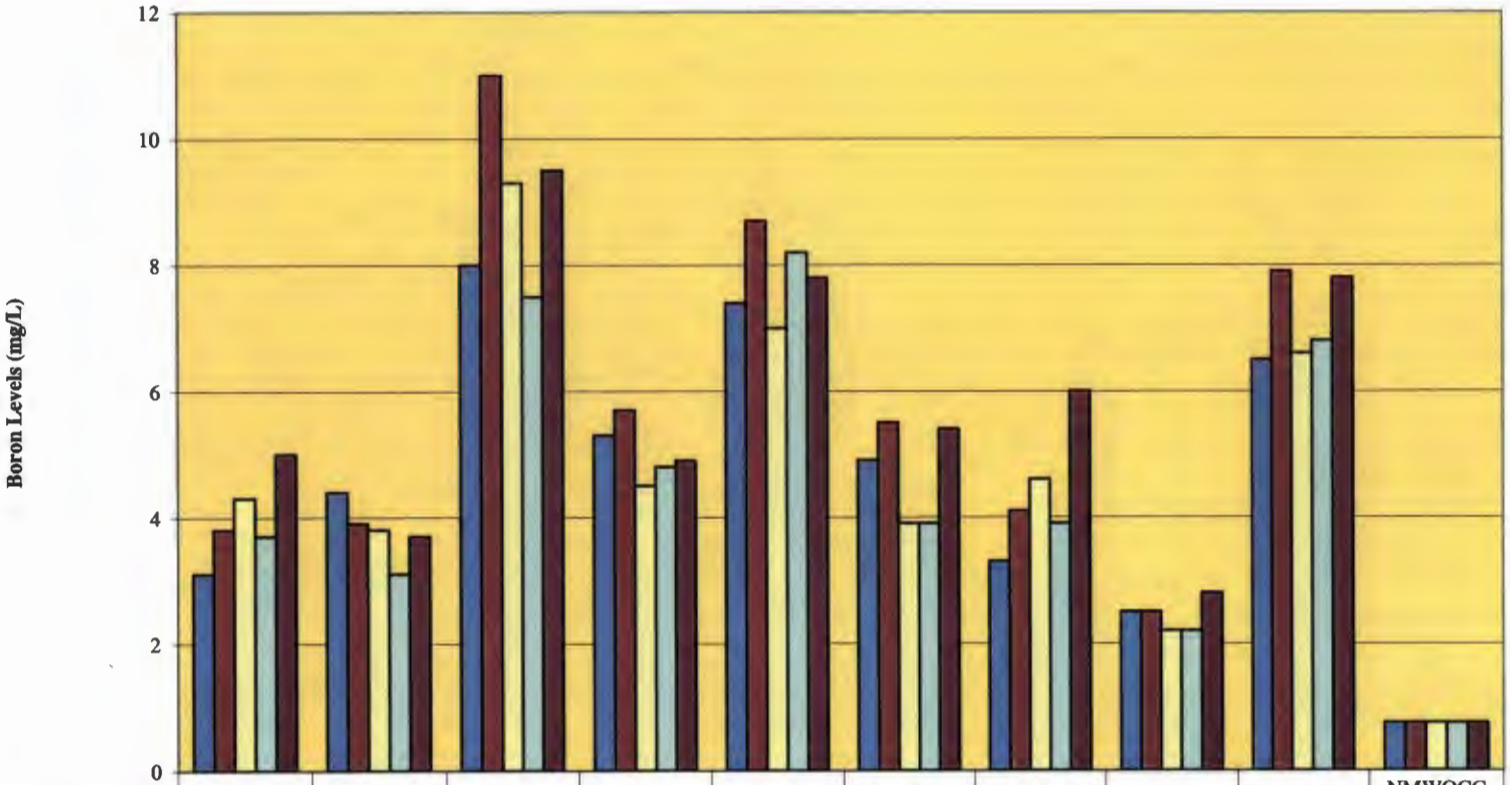
HELSTF Chromium Spill Site
Groundwater Sampling Results for Trichloroethene



	HMW-11	HMW-13	HMW-36	HMW-37	HMW-38	HMW-39	HMW-40	HMW-41	HMW-43	NMWQCC Standard
Fall 1998	92	0	0	0	13	0	0	400	0	100
Spring 1999	60	0	0	0	13	110	0	440	0	100
Spring 2000	61	0	0	0	14	100	0	440	0	100
Fall 2000	66	0	0	0	16	100	0	410	0	100
Spring 2001	53	0	0	0	12.8	76.7	0	318	0	100

Well Name

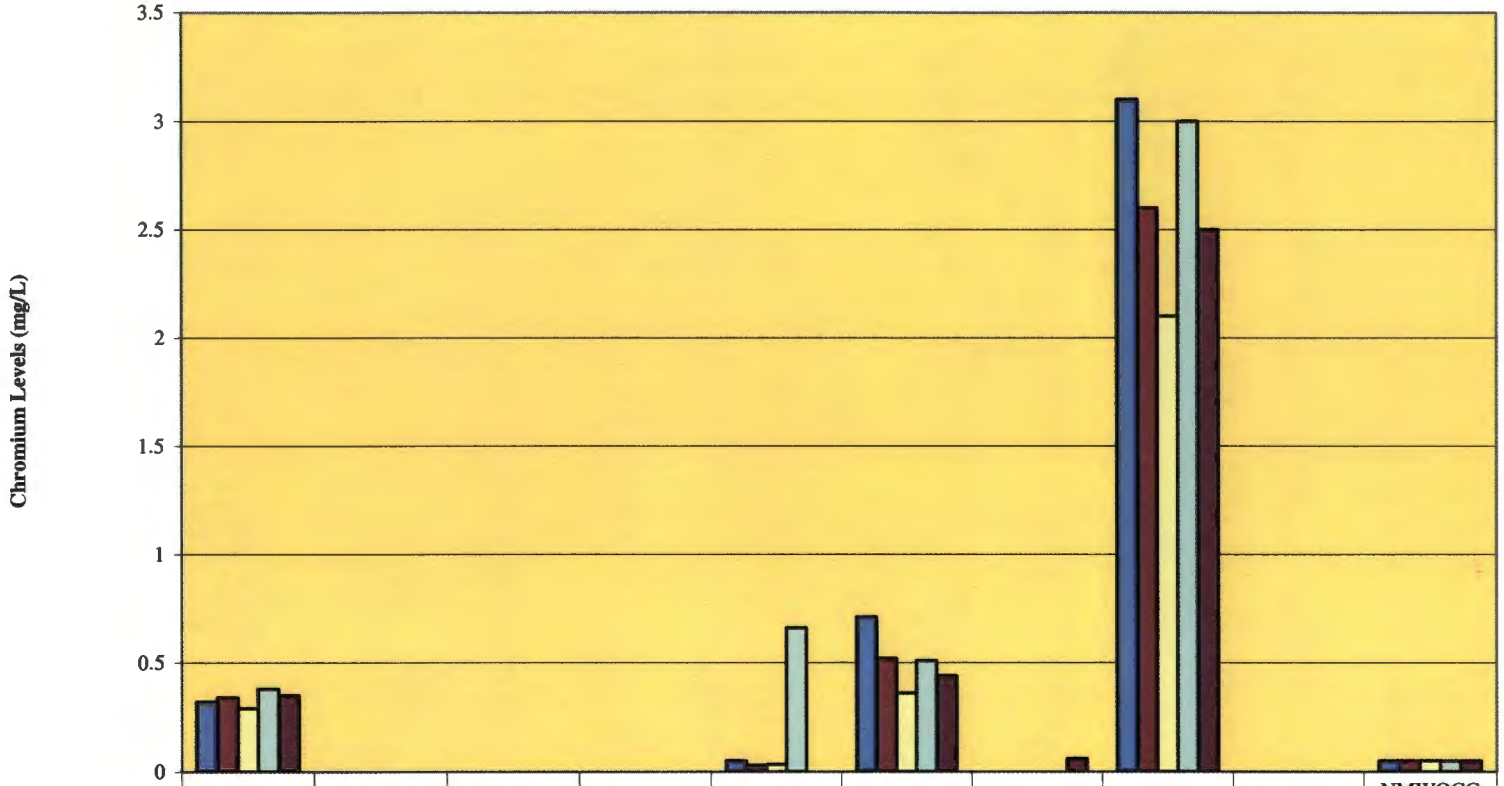
HELSTF Chromium Spill Site
Groundwater Sampling Results for Boron



	HMW-11	HMW-13	HMW-36	HMW-37	HMW-38	HMW-39	HMW-40	HMW-41	HMW-43	NMWQCC Standard
Fall 1998	3.1	4.4	8	5.3	7.4	4.9	3.3	2.5	6.5	0.75
Spring 1999	3.8	3.9	11	5.7	8.7	5.5	4.1	2.5	7.9	0.75
Spring 2000	4.3	3.8	9.3	4.5	7	3.9	4.6	2.2	6.6	0.75
Fall 2000	3.7	3.1	7.5	4.8	8.2	3.9	3.9	2.2	6.8	0.75
Spring 2001	5	3.7	9.5	4.9	7.8	5.4	6	2.8	7.8	0.75

Well Name

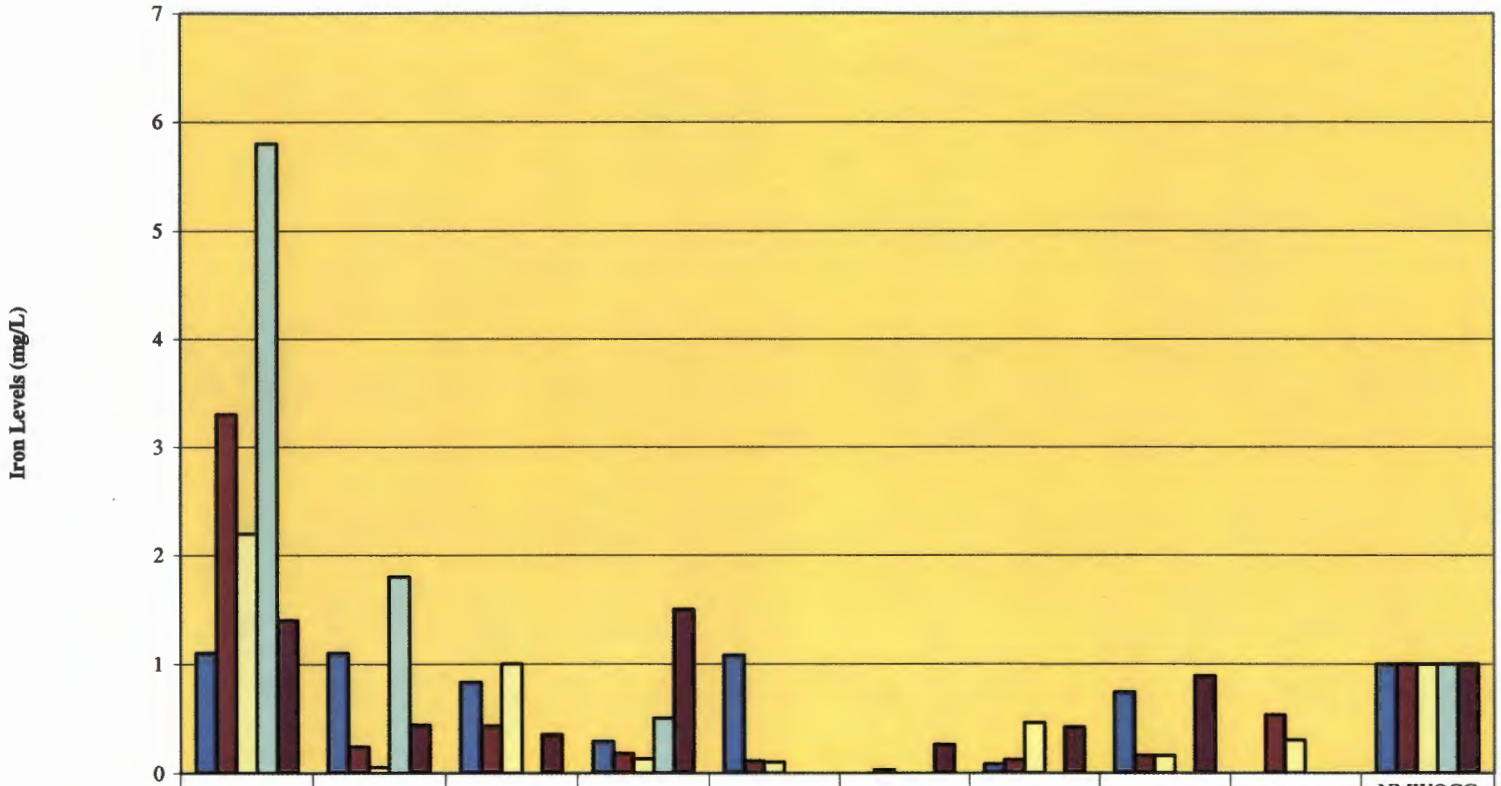
HELSTF Chromium Spill Site
Groundwater Sampling Results for Chromium



	HMW-11	HMW-13	HMW-36	HMW-37	HMW-38	HMW-39	HMW-40	HMW-41	HMW-43	NMWQCC Standard
Fall 1998	0.32	0	0	0	0.05	0.71	0	3.1	0	0.05
Spring 1999	0.34	0	0	0	0.03	0.52	0	2.6	0	0.05
Spring 2000	0.29	0	0	0	0.034	0.36	0	2.1	0	0.05
Fall 2000	0.38	0	0	0	0.66	0.51	0	3	0	0.05
Spring 2001	0.35	0	0	0	0	0.44	0.061	2.5	0	0.05

Well Name

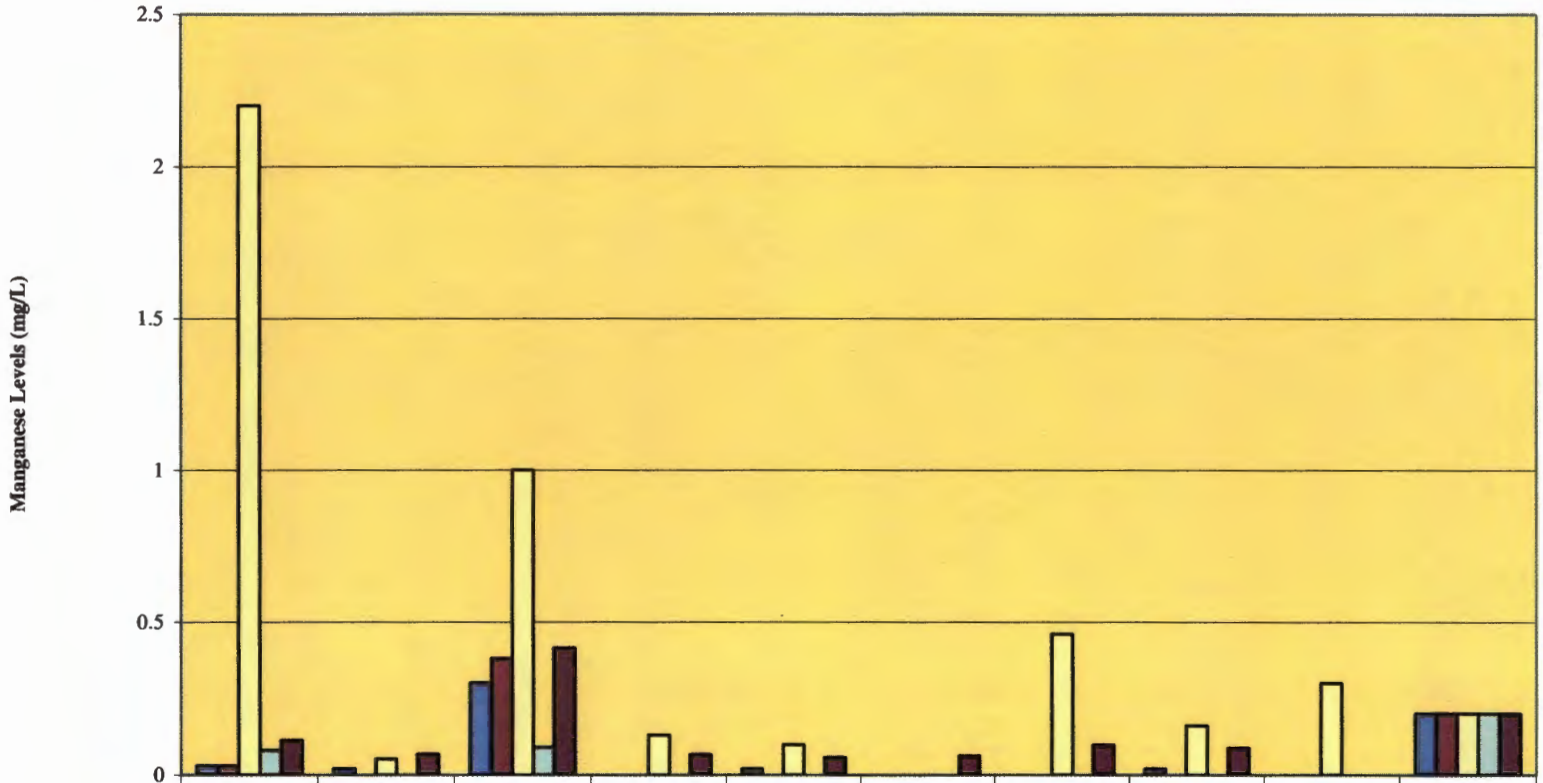
HELSTF Chromium Spill Site
Groundwater Sampling Results for Iron



	HMW-11	HMW-13	HMW-36	HMW-37	HMW-38	HMW-39	HMW-40	HMW-41	HMW-43	NMWQCC Standard
Fall 1998	1.1	1.1	0.83	0.29	1.08	0	0.08	0.74	0	1
Spring 1999	3.3	0.24	0.43	0.18	0.11	0.03	0.12	0.16	0.53	1
Spring 2000	2.2	0.052	1	0.13	0.099	0	0.46	0.16	0.3	1
Fall 2000	5.8	1.8	0	0.5	0	0	0	0	0	1
Spring 2001	1.4	0.44	0.35	1.5	0	0.26	0.42	0.89	0	1

Well Name

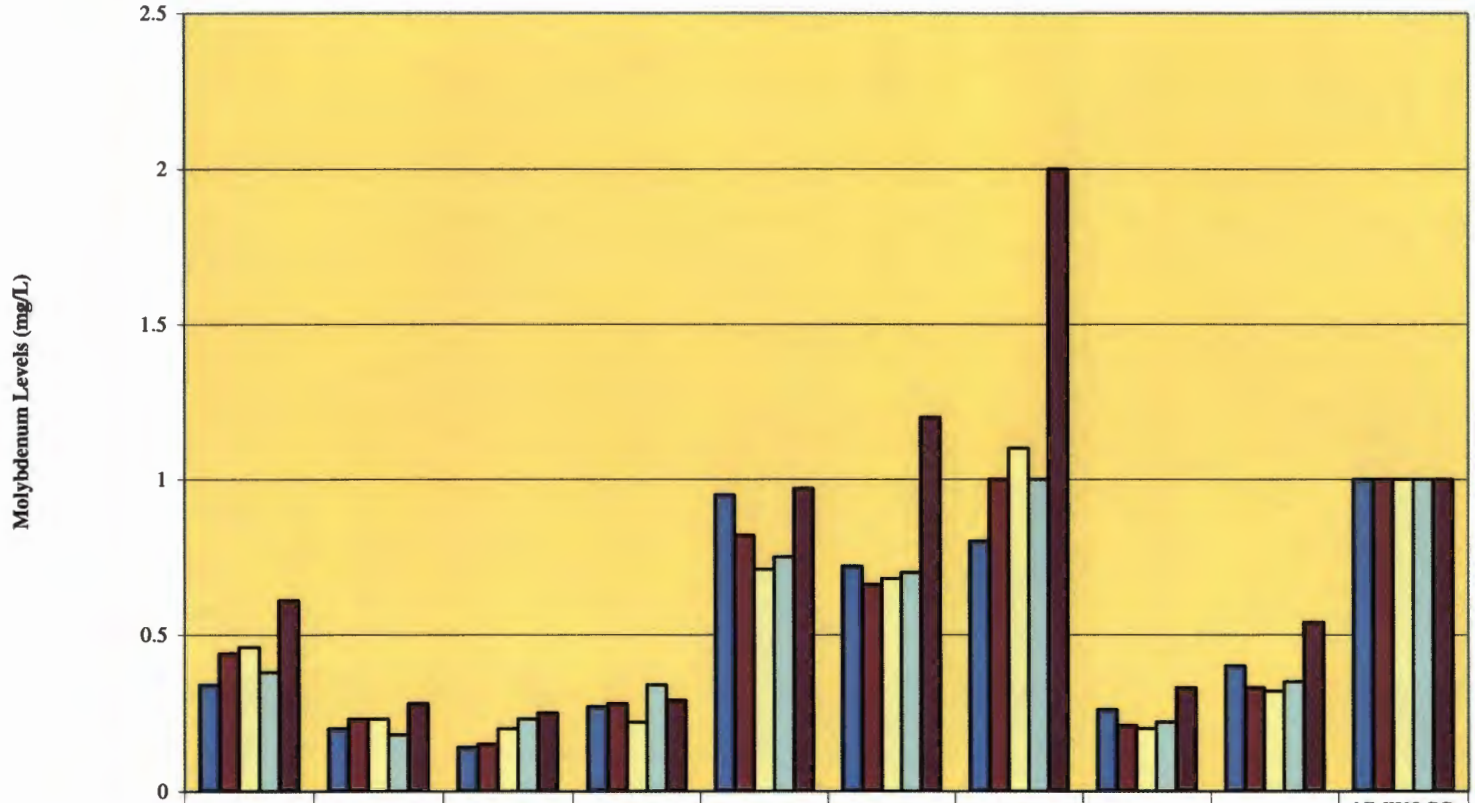
HELSTF Chromium Spill Site
Groundwater Sampling Results for Manganese



	HMW-11	HMW-13	HMW-36	HMW-37	HMW-38	HMW-39	HMW-40	HMW-41	HMW-43	NMWQCC Standard
Fall 1998	0.03	0.02	0.3	0	0.02	0	0	0.02	0	0.2
Spring 1999	0.03	0	0.38	0	0	0	0	0	0	0.2
Spring 2000	2.2	0.052	1	0.13	0.099	0	0.46	0.16	0.3	0.2
Fall 2000	0.08	0	0.09	0	0	0	0	0	0	0.2
Spring 2001	0.113	0.067	0.415	0.066	0.057	0.062	0.098	0.087	0	0.2

Well Name

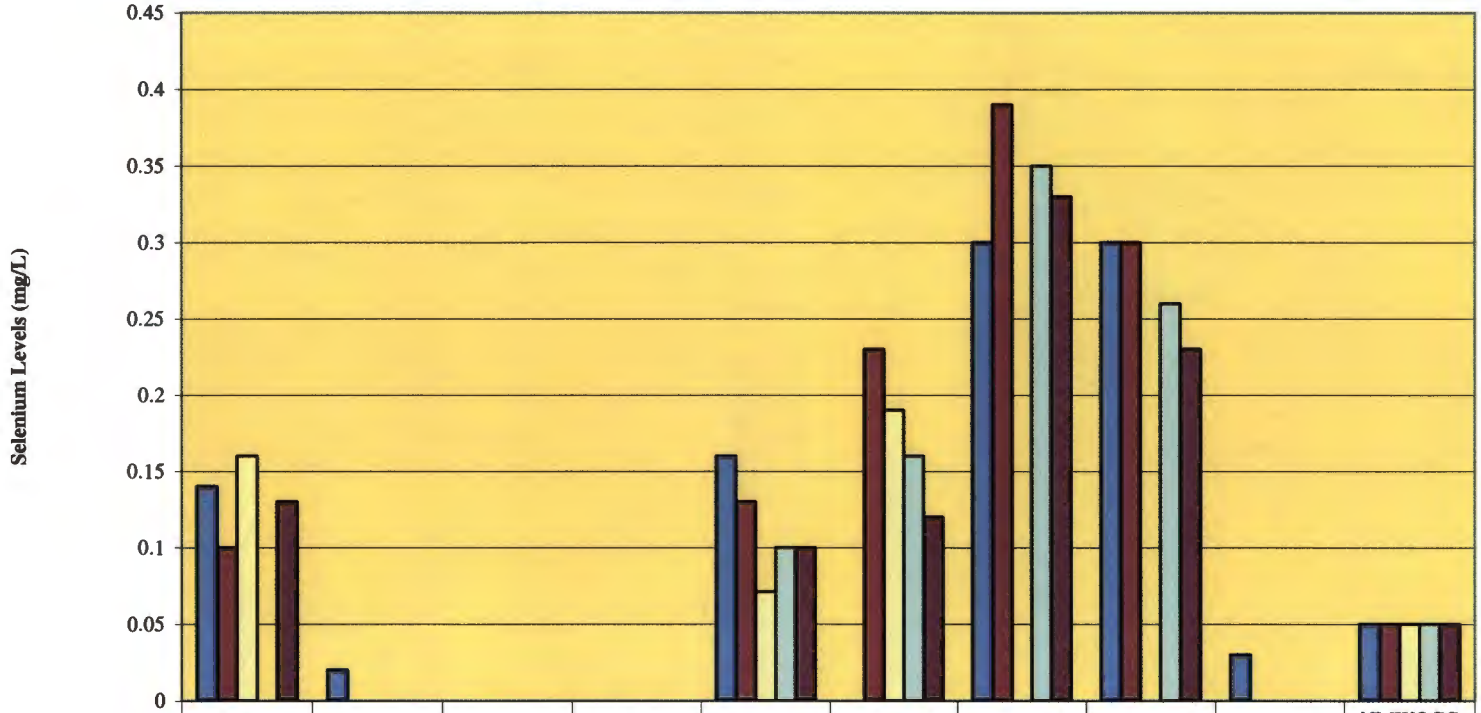
HELSTF Chromium Spill Site
Groundwater Sampling Results for Molybdenum



	HMW-11	HMW-13	HMW-36	HMW-37	HMW-38	HMW-39	HMW-40	HMW-41	HMW-43	NMWQCC Standard
Fall 1998	0.34	0.2	0.14	0.27	0.95	0.72	0.8	0.26	0.4	1
Spring 1999	0.44	0.23	0.15	0.28	0.82	0.66	1	0.21	0.33	1
Spring 2000	0.46	0.23	0.2	0.22	0.71	0.68	1.1	0.2	0.32	1
Fall 2000	0.38	0.18	0.23	0.34	0.75	0.7	1	0.22	0.35	1
Spring 2001	0.61	0.28	0.25	0.29	0.97	1.2	2	0.33	0.54	1

Well Name

HELSTF Chromium Spill Site
Groundwater Sampling Results for Selenium



	HMW-11	HMW-13	HMW-36	HMW-37	HMW-38	HMW-39	HMW-40	HMW-41	HMW-43	NMWQCC Standard
Fall 1998	0.14	0.02	0	0	0.16	0	0.3	0.3	0.03	0.05
Spring 1999	0.1	0	0	0	0.13	0.23	0.39	0.3	0	0.05
Spring 2000	0.16	0	0	0	0.071	0.19	0	0	0	0.05
Fall 2000	0	0	0	0	0.1	0.16	0.35	0.26	0	0.05
Spring 2001	0.13	0	0	0	0.1	0.12	0.33	0.23	0	0.05

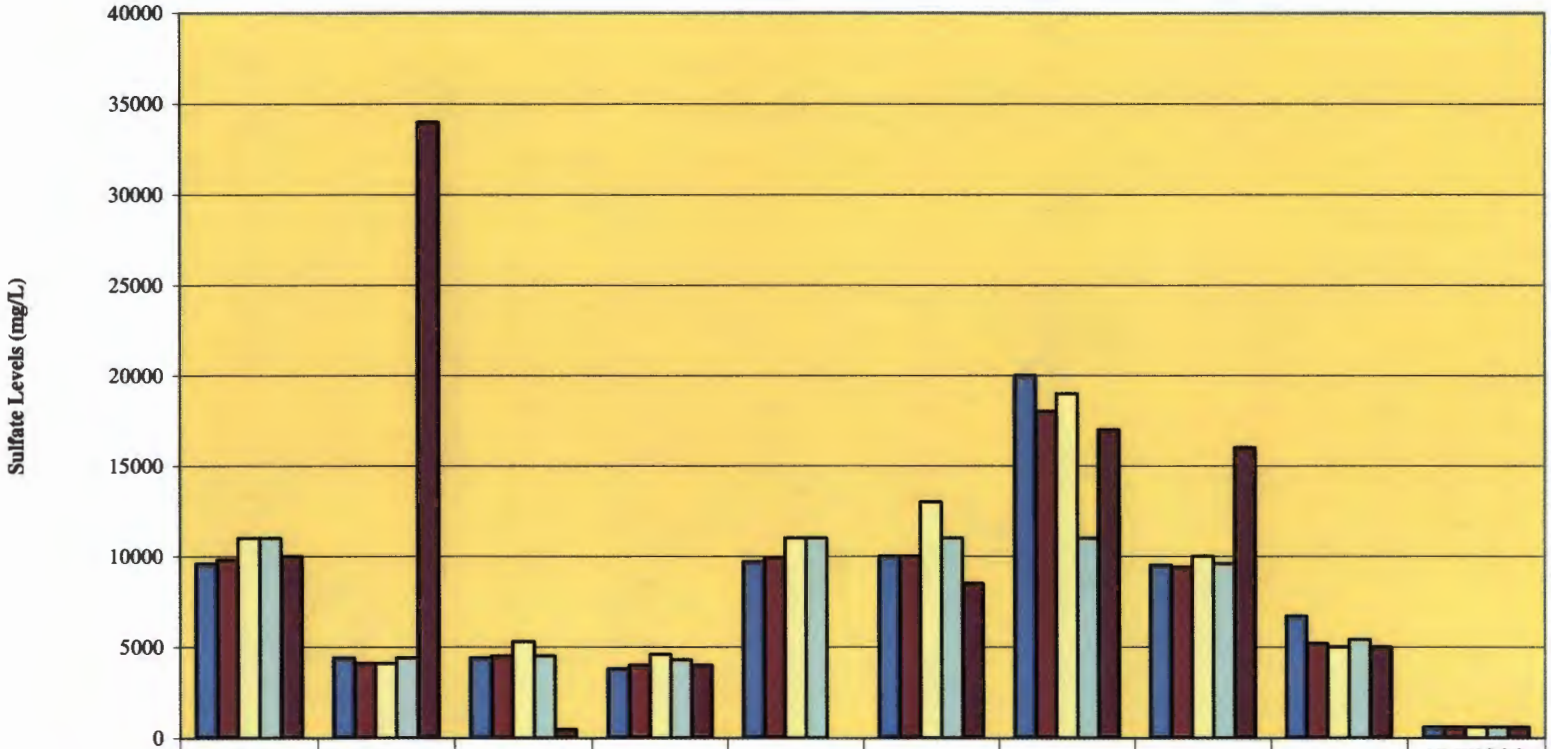
Well Name

HELSTF Chromium Spill Site
Groundwater Sampling Results for Silver

	HMW-11	HMW-13	HMW-36	HMW-37	HMW-38	HMW-39	HMW-40	HMW-41	HMW-43	NMWQCC Standard
Fall 1998	0	0	0	0	0	0	0	0	0	0.05
Spring 1999	0	0	0	0	0	0	0	0	0	0.05
Spring 2000	0	0	0	0	0	0	0.012	0	0	0.05
Fall 2000	0	0	0	0	0	0	0	0	0	0.05
Spring 2001	0	0.11	0	0	0	0	0	0	0	0.05

Well Name

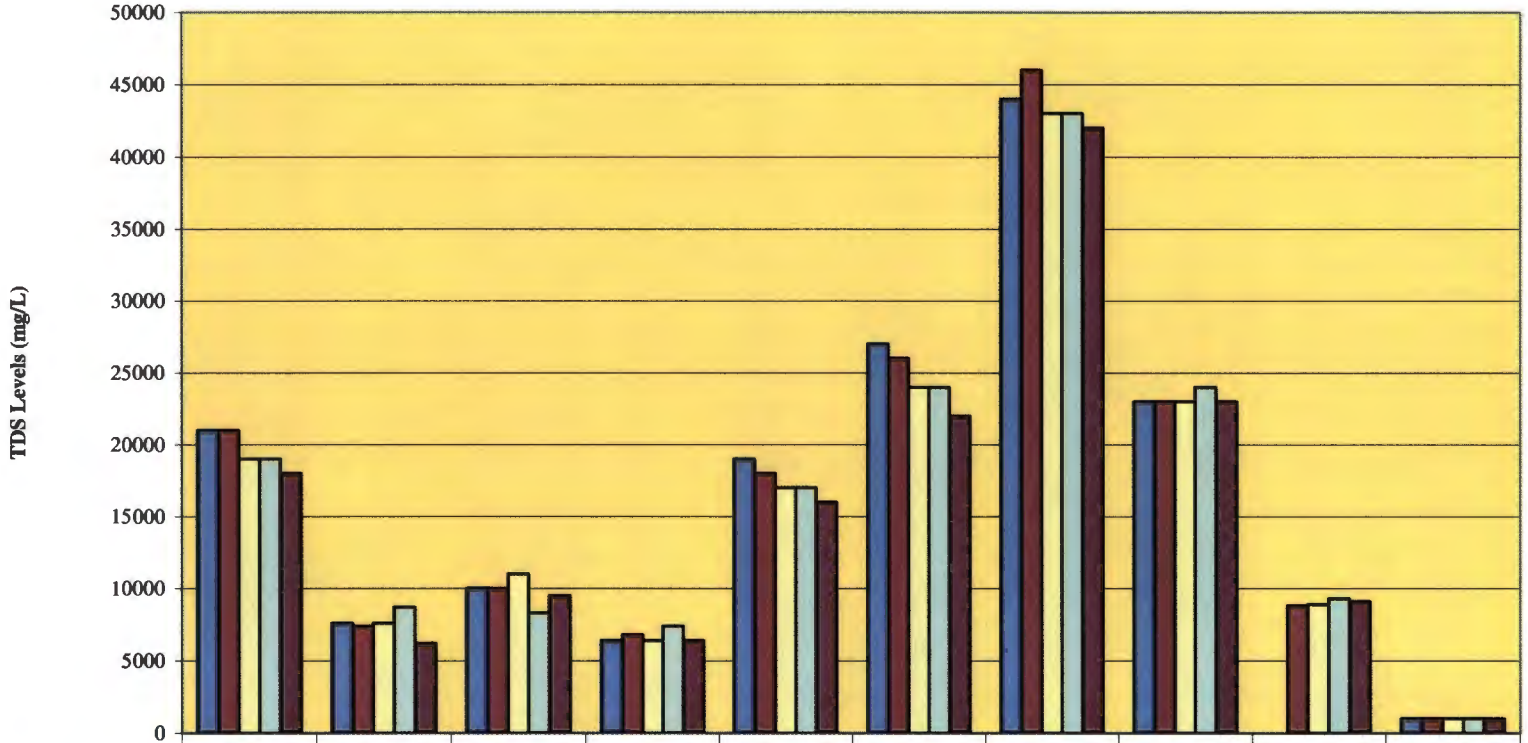
Chromium Spill Site
Groundwater Sampling Results for Sulfate



	HMW-11	HMW-13	HMW-36	HMW-37	HMW-38	HMW-39	HMW-40	HMW-41	HMW-43	NMWQCC Standard
Fall 1998	9600	4400	4400	3800	9700	10000	20000	9500	6700	600
Spring 1999	9800	4100	4500	4000	9930	10000	18000	9400	5200	600
Spring 2000	11000	4100	5300	4600	11000	13000	19000	10000	5000	600
Fall 2000	11000	4400	4500	4300	11000	11000	11000	9600	5400	600
Spring 2001	10000	34000	470	4000	0	8500	17000	16000	5000	600

Well Name

HELSTF Chromium Spill Site
Groundwater Sampling Results for TDS



	HMW-11	HMW-13	HMW-36	HMW-37	HMW-38	HMW-39	HMW-40	HMW-41	HMW-43	NMWQCC Standard
Fall 1998	21000	7600	10000	6400	19000	27000	44000	23000	0	1000
Spring 1999	21000	7400	10000	6800	18000	26000	46000	23000	8800	1000
Spring 2000	19000	7600	11000	6400	17000	24000	43000	23000	8900	1000
Fall 2000	19000	8700	8300	7400	17000	24000	43000	24000	9300	1000
Spring 2001	18000	6200	9500	6400	16000	22000	42000	23000	9100	1000

Well Name

APPENDIX B

SAMPLING PROCEDURES

SAMPLE PROCEDURES

Upon arrival at a well, field personnel record field observations and other pertinent information in a field logbook. Included in the log are the date, names of sampling team members, time of arrival, well identification number, air temperature, relative humidity, wind direction and approximate speed, and general weather condition (i.e. cloudy, rain or sun, etc.).

Following the entry of preliminary information to the log, the well cap is opened and the depth to water is determined. The depth to water is measured with an electric water level probe and recorded in the logbook. Total depth of the well is determined either by a direct measurement with the probe, or from field information sheets that are prepared from original well construction "as built" drawings before going into the field.

Well volume is calculated by subtracting the depth to water from the total depth of the well to obtain a value for the height (h) of the water column; the value "h" is then used in the formula for the volume (in gallons) of a cylinder ($V= d^2h[0.041]$: where d^2 is the diameter of the well casing in inches, squared, and the constant 0.041 is derived from π [22/7] and the conversion factor for volume in cubic feet to gallons[7.4805]). Prior to sample collection, three times the well volume of groundwater (V) is removed from the well. Purging the well in this manner is done to ensure that samples are representative of groundwater from the formation rather than condensation or stagnant water.

Water quality measurements are obtained with a calibrated, decontaminated Horiba water quality meter. The probe is inserted into the well in front of (below) the pump. During purging, the Horiba meter is continuously monitored and the data is recorded as water is drawn into the well. Data is recorded for time, volume, temperature, pH, conductivity and appearance and recorded in a bound field logbook.

Decontamination is performed on site with an Alconox/tap water solution and a tap water rinse. Any down-hole equipment (water level probe, pumps, tubing, probe meters and wires) are decontaminated with the Alconox/tap water solution and rinsed with tap water. All decontamination and purge water are stored on-site in sealed 55-gallon drums with lables indicating that disposal analysis is pending. Disposal of the waste generated during sampling is properly disposed of off site.

Each sample is collected in new, certified clean containers. Preservatives are added to the water when required by the analytical method, until the proper pH is reached; less than 2 when preserving with acids and greater than 13 when preserving with bases. Sample fractions to be analyzed for dissolved constituents are field filtered by pumping through a 0.45 micron disposable filter with a peristaltic pump and clean tygon tubing. Sample containers are labeled with sample name and number, sealed in a plastic bag, and packed in ice so as not to exceed a temperature of 4° C (39.2° F) during transport to the laboratory. A chain-of-custody form is completed, sealed in a plastic bag, and placed inside the ice chest. Copies of the chain-of-custody forms for these sampling events are included in the Appendices. Sample coolers are sealed with chain-of-custody tape and submitted to the analytical laboratory via lab courier or overnight delivery service.

APPENDIX C

PURGE AND DECONTAMINATION WATER DISPOSAL

This information is not presently available. Upon receipt of disposal documentation manifests, MEVATEC will submit them under a separate cover.

APPENDIX D

CHEMICAL ANALYTICAL DATA
SPRING 2001 SAMPLING EVENT

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
155 McCutcheon, Suite H El Paso, Texas 79932 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

March 15, 2001

Subject: Metals Analysis

Dear Valued Client:

This is a letter to inform you that the sample(s) TraceAnalysis received from you for metals analysis was shipped to ATEL (Aqua Tech Environmental Laboratories, Inc) for metals analysis. ATEL is currently certified by A2LA (American Association of Laboratory Accreditation) for metals analysis. ATEL has a quality assurance program that is equal to TraceAnalysis' and we are sure you will be pleased with their product. TraceAnalysis has been working with this laboratory for four years and trust their quality and performance. The reason for the subbing the metals analysis out of our laboratory is to allow our metals department to re-tool. The metals department is taking steps to improve on quality, instrumentation, training and turnaround times. This re-tooling will be completed in a short time and TraceAnalysis apologizes for the inconvenience. This is just another step TraceAnalysis is taking to improve the product for our clients.

Thank you,

James Taylor
QA Manager

Mevatec

Corporation

700_A21

Project ID: 700_A21
Project Manager: Karen Costa

Table of Contents

Sample Summary

Requested Analyses

Subbed Analyses Sample ID Index

Analytical Results:

Mercury Results and Quality Control

Volatile Organic Samples and Trip Blank Results
Volatile Organic Samples and Trip Blank Quality Control

Semi-Volatile Organic Results and Quality Control

Explosives Results and Quality Control

Pesticides Results and Quality Control

TOC Results and Quality Control

DRO Results and Quality Control

GRO Results and Quality Control

TDS Results and Quality Control

pH Results and Quality Control

Specific Conductance Results and Quality Control

Alkalinity Results and Quality Control

Total Cyanide Results and Quality Control

Dissolved Ion Results and Quality Control

Ammonia Results and Quality Control

TKN Results and Quality Control

Hexavalent Chromium Results and Quality Control

Subbed Analysis Results and Quality Control
- Ammonium Perchlorate
- Herbicides
- Total Metals
- Dissolved Metals
- Total Phosphorous

... Continued

Continued...

Chains of Custody

Mevatec 700_A21 Analyte List

Requested Analysis for 700_A21

Dissolved Ions

Chloride
Fluoride
Bromide
Sulfate
Nitrate/Nitrite
Ammonium Perchlorate

Water Quality

pH
Specific Conductance
Residue, Dissolved (TDS)
Alkalinity
Total Cyanide

Nutrients

Amonnia (NH_3+NH_4)
Total Kjedahl Nitrogen (TKN)
Total Phosphorous

Total Metals

Aluminum	Chromium	Manganese	Strontium
Arsenic	Chromium $^{6+}$	Mercury	Tin
Barium	Cobalt	Molybdenum	Vanadium
Beryllium	Copper	Nickel	Zinc
Boron	Iron	Selenium	
Cadmium	Lead	Silicon	
Calcium	Magnesium	Silver	

Dissolved Metals

Aluminum	Chromium	Manganese	Strontium
Arsenic	Cobalt	Molybdenum	Tin
Barium	Copper	Nickel	Vanadium
Beryllium	Iron	Selenium	Zinc
Boron	Lead	Silicon	
Cadmium	Lithium	Silver	
Calcium	Magnesium		

Organics

Volatiles
SemiVolatiles
Explosive Residues
TOC
Petroleum Hydrocarbons (GRO & DRO)
Pesticides
Herbicides

SAMPLE SUMMARY

CLIENT: Mevatec Corporation
PROJECT ID: 700_A21

TraceAnalysis ID	MEVATEC ID	Sample Date	Matrix	Temperature Upon Receipt
163945	0143-HMW13-0101-QC	1/29/01	WATER	4 °C
163946	0143-HMW13-0101-QC-TB	1/29/01	WATER	4 °C
163947	0143-HMW11-0101	1/29/01	WATER	4 °C
163948	0143-HMW11-0101-TB	1/29/01	WATER	4 °C
163949	0143-HMW43-0101	1/29/01	WATER	4 °C
163950	0143-HMW43-0101-TB	1/29/01	WATER	4 °C
163951	0143-HMW13-0101	1/29/01	WATER	4 °C
163952	0143-HMW13-0101-TB	1/29/01	WATER	4 °C
164014	0143-HMW38-0101	1/30/01	WATER	4 °C
164015	0143-HMW38-0101-TB	1/30/01	WATER	4 °C
164016	0143-HMW37-0101	1/30/01	WATER	4 °C
164017	0143-HMW37-0101-TB	1/30/01	WATER	4 °C
164115	0143-HMW39-0101	1/31/01	WATER	4 °C
164116	0143-HMW39-0101-TB	1/31/01	WATER	4 °C
164117	0143-HMW36-0101	1/31/01	WATER	4 °C
164118	0143-HMW36-0101-TB	1/31/01	WATER	4 °C
164119	0143-HMW39-0101-QC	1/31/01	WATER	4 °C
164120	0143-HMW39-0101-QC-TB	1/31/01	WATER	4 °C
164121	0143-HMW40-0101	1/31/01	WATER	4 °C
164122	0143-HMW40-0101-TB	1/31/01	WATER	4 °C
164123	0143-HMW41-0101	1/31/01	WATER	4 °C
164124	0143-HMW41-0101-TB	1/31/01	WATER	4 °C

SUBBED ANALYSIS SAMPLE ID INDEX (ATEL)

TraceAnalysis	Ammonium Perchlorate	Herbicides	Metals
163945	020101062	MEL01-01243	MAR01-05426
163947	020101060	MEL01-01241	MAR01-05427
163949	020101063	MEL01-01244	MAR01-05428
163951	020101061	MEL01-01242	MAR01-05429
164014	020101064	MEL01-01329	MAR01-05430
164016	020101065	MEL01-01330	MAR01-05431
164115	020201013	MEL01-01387	MAR01-05432
164117	020201012	MEL01-01386	MAR01-05433
164119	020201014	MEL01-01388	MAR01-05434
164121	020201015	MEL01-01487	MAR01-05435
164123	020201016	MEL01-01488	MAR01-05436

* The analyses for Hexavalent Chromium, Dissolved Ions, pH, Specific Conductance, TDS, and Alkalinity were performed in the TraceAnalysis laboratory in El Paso, Texas. The Sample ID Index is the same as that of TraceAnalysis in Lubbock, Texas.

Mercury Results and Quality Control

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
155 McCutcheon, Suite H El Paso, Texas 79932 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Karen Costa
Mevatec
P.O. Box 399 Bldg. 126
WSMR, NM 88002

Report Date: March 6, 2001

Order ID Number: A01013023

Project Number: 700 A21
Project Name: Groundwater Sampling HELSTF Chrome Site
Project Location: N/A

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
163945	0143-HMW13-0101-QC	Water	1/29/01	12:35	1/30/01
163947	0143-HMW11-0101	Water	1/29/01	10:29	1/30/01
163949	0143-HMW43-0101	Water	1/29/01	14:02	1/30/01
163951	0143-HMW13-0101	Water	1/29/01	12:35	1/30/01
164014	0143-HMW38-0101	Water	1/30/01	11:28	1/31/01
164016	0143-HMW37-0101	Water	1/30/01	12:00	1/31/01
164115	0143-HMW39-0101	Water	1/31/01	11:57	1/31/01
164117	0143-HMW36-0101	Water	1/31/01	11:10	1/31/01
164119	0143-HMW39-0101-QC	Water	1/31/01	11:57	1/31/01
164121	0143-HMW40-0101	Water	1/31/01	13:12	1/31/01
164123	0143-HMW41-0101	Water	1/31/01	12:20	1/31/01

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 7 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael T. Abel
Dr. Blair Leftwich, Director

Analytical Report

Sample: 163945 - 0143-HMW13-0101-QC

Analysis:	Hg, Total	Analytical Method:	S 7470A	QC Batch:	QC08789	Date Analyzed:	2/3/01
Analyst:	SSC	Preparation Method:	N/A	Prep Batch:	PB07585	Date Prepared:	2/2/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 163947 - 0143-HMW11-0101

Analysis:	Hg, Total	Analytical Method:	S 7470A	QC Batch:	QC08790	Date Analyzed:	2/3/01
Analyst:	SSC	Preparation Method:	N/A	Prep Batch:	PB07585	Date Prepared:	2/2/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 163949 - 0143-HMW43-0101

Analysis:	Hg, Total	Analytical Method:	S 7470A	QC Batch:	QC08790	Date Analyzed:	2/3/01
Analyst:	SSC	Preparation Method:	N/A	Prep Batch:	PB07585	Date Prepared:	2/2/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 163951 - 0143-HMW13-0101

Analysis:	Hg, Total	Analytical Method:	S 7470A	QC Batch:	QC08790	Date Analyzed:	2/3/01
Analyst:	SSC	Preparation Method:	N/A	Prep Batch:	PB07585	Date Prepared:	2/2/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 164014 - 0143-HMW38-0101

Analysis:	Hg, Total	Analytical Method:	S 7470A	QC Batch:	QC08914	Date Analyzed:	2/8/01
Analyst:	SSC	Preparation Method:	N/A	Prep Batch:	PB07682	Date Prepared:	2/8/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 164016 - 0143-HMW37-0101

Analysis:	Hg, Total	Analytical Method:	S 7470A	QC Batch:	QC08914	Date Analyzed:	2/8/01
Analyst:	SSC	Preparation Method:	N/A	Prep Batch:	PB07682	Date Prepared:	2/8/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 164115 - 0143-HMW39-0101

Analysis:	Hg, Total	Analytical Method:	S 7470A	QC Batch:	QC08914	Date Analyzed:	2/8/01
Analyst:	SSC	Preparation Method:	N/A	Prep Batch:	PB07682	Date Prepared:	2/8/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 164117 - 0143-HMW36-0101

Analysis:	Hg, Total	Analytical Method:	S 7470A	QC Batch:	QC08914	Date Analyzed:	2/8/01
Analyst:	SSC	Preparation Method:	N/A	Prep Batch:	PB07682	Date Prepared:	2/8/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 164119 - 0143-HMW39-0101-QC

Analysis:	Hg, Total	Analytical Method:	S 7470A	QC Batch:	QC08914	Date Analyzed:	2/8/01
Analyst:	SSC	Preparation Method:	N/A	Prep Batch:	PB07682	Date Prepared:	2/8/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 164121 - 0143-HMW40-0101

Analysis:	Hg, Total	Analytical Method:	S 7470A	QC Batch:	QC08914	Date Analyzed:	2/8/01
Analyst:	SSC	Preparation Method:	N/A	Prep Batch:	PB07682	Date Prepared:	2/8/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 164123 - 0143-HMW41-0101

Analysis:	Hg, Total	Analytical Method:	S 7470A	QC Batch:	QC08914	Date Analyzed:	2/8/01
Analyst:	SSC	Preparation Method:	N/A	Prep Batch:	PB07682	Date Prepared:	2/8/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Quality Control Report
Method Blank

Method Blank QCBatch: QC08789

Param	Flag	Results	Units	Reporting Limit
Total Mercury		<0.0002	mg/L	0.0002

Method Blank QCBatch: QC08790

Param	Flag	Results	Units	Reporting Limit
Total Mercury		<0.0002	mg/L	0.0002

Method Blank QCBatch: QC08914

Param	Flag	Results	Units	Reporting Limit
Total Mercury		<0.0002	mg/L	0.0002

Quality Control Report
Lab Control Spikes and Duplicate Spikes

LCS QC Batch: QC08789

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Mercury		0.00111	mg/L	1	0.001	<0.0002	111		80 - 120	20

LCSD QC Batch: QC08789

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Mercury		0.0011	mg/L	1	0.001	<0.0002	110	1	80 - 120	20

LCS QC Batch: QC08790

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Mercury		0.00111	mg/L	1	0.001	<0.0002	111		80 - 120	20

LCSD QC Batch: QC08790

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Mercury		0.0011	mg/L	1	0.001	<0.0002	110	1	80 - 120	20

LCS QC Batch: QC08914

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Mercury		0.00097	mg/L	1	0.001	<0.0002	97		80 - 120	20

LCSD QC Batch: QC08914

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Mercury		0.00112	mg/L	1	0.001	<0.0002	112	14	80 - 120	20

Quality Control Report
Matrix Spikes and Duplicate Spikes

MS QC Batch: QC08789

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Mercury		0.0011	mg/L	1	0.001	<0.0002	110		80 - 120	20

MSD QC Batch: QC08789

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Mercury		0.0011	mg/L	1	0.001	<0.0002	110	0	80 - 120	20

MS QC Batch: QC08790

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Mercury		0.00111	mg/L	1	0.001	<0.0002	111		80 - 120	20

MSD QC Batch: QC08790

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Mercury		0.00105	mg/L	1	0.001	<0.0002	105	6	80 - 120	20

MS QC Batch: QC08914

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Mercury		0.00111	mg/L	1	0.001	<0.0002	111		80 - 120	20

MSD QC Batch: QC08914

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Mercury		0.00115	mg/L	1	0.001	<0.0002	115	4	80 - 120	20

Quality Control Report
Continuing Calibration Verification Standards

CCV (1) QC Batch: QC08789

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.001	0.00104	104	80 - 120	2/3/01

ICV (1) QC Batch: QC08789

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.001	0.0011	110	80 - 120	2/3/01

CCV (1) QC Batch: QC08790

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.001	0.00082	82	80 - 120	2/3/01

ICV (1) QC Batch: QC08790

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.001	0.0011	110	80 - 120	2/3/01

CCV (1) QC Batch: QC08914

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.001	0.00094	94	80 - 120	2/8/01

ICV (1) QC Batch: QC08914

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.001	0.00109	109	80 - 120	2/8/01

Volatile Organic Samples and Trip Blank Results
Volatile Organic Samples and Trip Blank Quality Control

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Karen Costa
Mevatec
P.O. Box 399 Bldg. 126
WSMR, NM 88002

Report Date: March 8, 2001

Order ID Number: A01013023

Project Number: 700 A21
Project Name: Groundwater Sampling HELSTF Chrome Site
Project Location: N/A

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
163945	0143-HMW13-0101-QC	Water	1/29/01	12:35	1/30/01
163946	0143-HMW13-0101-QC-TB	Water	1/29/01	12:35	1/30/01
163947	0143-HMW11-0101	Water	1/29/01	10:29	1/30/01
163948	0143-HMW11-0101-TB	Water	1/29/01	10:29	1/30/01
163949	0143-HMW43-0101	Water	1/29/01	14:02	1/30/01
163950	0143-HMW43-0101-TB	Water	1/29/01	14:02	1/30/01
163951	0143-HMW13-0101	Water	1/29/01	12:35	1/30/01
163952	0143-HMW13-0101-TB	Water	1/29/01	12:35	1/30/01
164014	0143-HMW38-0101	Water	1/30/01	11:28	1/31/01
164015	0143-HMW38-0101-TB	Water	1/30/01	11:28	1/31/01
164016	0143-HMW37-0101	Water	1/30/01	12:00	1/31/01
164017	0143-HMW37-0101-TB	Water	1/30/01	12:00	1/31/01
164115	0143-HMW39-0101	Water	1/31/01	11:57	1/31/01
164116	0143-HW39-0101-TB	Water	1/31/01	11:57	1/31/01
164117	0143-HMW36-0101	Water	1/31/01	11:10	1/31/01
164118	0143-HMW36-0101-TB	Water	1/31/01	11:10	1/31/01
164119	0143-HMW39-0101-QC	Water	1/31/01	11:57	1/31/01
164120	0143-HMW39-0101-QC-TB	Water	1/31/01	11:57	1/31/01
164121	0143-HMW40-0101	Water	1/31/01	13:12	1/31/01
164122	0143-HMW40-0101-TB	Water	1/31/01	13:12	1/31/01
164123	0143-HMW41-0101	Water	1/31/01	12:20	1/31/01
164124	0143-HMW41-0101-TB	Water	1/31/01	12:20	1/31/01

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

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Michael T. Abel

Dr. Blair Leftwich, Director

Analytical Report

Sample: 163945 - 0143-HMW13-0101-QC

Analysis:	8260	Analytical Method:	S 8260B	QC Batch:	QC09125	Date Analyzed:	2/12/01
Analyst:	JG	Preparation Method:	E 5030B	Prep Batch:	PB07855	Date Prepared:	2/12/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1
Chloromethane (methyl chloride)		<1.00	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<1.00	µg/L	1	1
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<1.00	µg/L	1	1
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<1.00	µg/L	1	1
Methylene chloride		<5.00	µg/L	1	5
MTBE		<1.00	µg/L	1	1
trans-1,2-Dichloroethene		<1.00	µg/L	1	1
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-dichloroethene		<1.00	µg/L	1	1
2,2-Dichloropropane		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1
Chloroform		2.28	µg/L	1	1
1,1,1-Trichloroethane		<1.00	µg/L	1	1
1,1-Dichloropropene		<1.00	µg/L	1	1
Benzene		<1.00	µg/L	1	1
Carbon Tetrachloride		<1.00	µg/L	1	1
1,2-Dichloropropane		<1.00	µg/L	1	1
Trichloroethene (TCE)		<1.00	µg/L	1	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1
Bromodichloromethane		<1.00	µg/L	1	1
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5
cis-1,3-Dichloropropene		<1.00	µg/L	1	1
trans-1,3-Dichloropropene		<1.00	µg/L	1	1
Toluene		<1.00	µg/L	1	1
1,1,2-Trichloroethane		<1.00	µg/L	1	1
1,3-Dichloropropane		<1.00	µg/L	1	1
Dibromochloromethane		<1.00	µg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1
Tetrachloroethene (PCE)		<1.00	µg/L	1	1
Chlorobenzene		<1.00	µg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1
Ethylbenzene		<1.00	µg/L	1	1
m,p-Xylene		<1.00	µg/L	1	1
Bromoform		<1.00	µg/L	1	1
Styrene		<1.00	µg/L	1	1
o-Xylene		<1.00	µg/L	1	1

Continued . . .

... *Continued* Sample: 163945 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1
2-Chlorotoluene		<1.00	μg/L	1	1
1,2,3-Trichloropropane		<1.00	μg/L	1	1
Isopropylbenzene		<1.00	μg/L	1	1
Bromobenzene		<1.00	μg/L	1	1
n-Propylbenzene		<1.00	μg/L	1	1
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1
tert-Butylbenzene		<1.00	μg/L	1	1
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1
sec-Butylbenzene		<1.00	μg/L	1	1
1,3-Dichlorobenzene		<1.00	μg/L	1	1
p-Isopropyltoluene		<1.00	μg/L	1	1
4-Chlorotoluene		<1.00	μg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1
n-Butylbenzene		<1.00	μg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5
Naphthalene		<5.00	μg/L	1	5
Hexachlorobutadiene		<5.00	μg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.53	μg/L	1	50	107	85 - 117
Toluene-d8		49.99	μg/L	1	50	99	93 - 109
4-Bromofluorobenzene		48.79	μg/L	1	50	97	76 - 109

Sample: 163946 - 0143-HMW13-0101-QC-TB

Analysis:	8260	Analytical Method:	S 8260B	QC Batch:	QC09038	Date Analyzed:	2/8/01
Analyst:	JG	Preparation Method:	E 5030B	Prep Batch:	PB07785	Date Prepared:	2/8/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	μg/L	1	1
Dichlorodifluoromethane		<1.00	μg/L	1	1
Chloromethane (methyl chloride)		<1.00	μg/L	1	1
Vinyl Chloride		<1.00	μg/L	1	1
Bromomethane (methyl bromide)		<1.00	μg/L	1	1
Chloroethane		<1.00	μg/L	1	1
Trichlorofluoromethane		<1.00	μg/L	1	1
Acetone		<10.0	μg/L	1	10
Iodomethane (methyl iodide)		<1.00	μg/L	1	1
Carbon Disulfide		<1.00	μg/L	1	1
Acrylonitrile		<1.00	μg/L	1	1
2-Butanone (MEK)		<5.00	μg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5
2-hexanone		<5.00	μg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10
1,1-Dichloroethene		<1.00	μg/L	1	1
Methylene chloride		<5.00	μg/L	1	5
MTBE		<1.00	μg/L	1	1

Continued ...

... *Continued* Sample: 163946 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
trans-1,2-Dichloroethene		<1.00	μg/L	1	1
1,1-Dichloroethane		<1.00	μg/L	1	1
cis-1,2-dichloroethene		<1.00	μg/L	1	1
2,2-Dichloropropane		<1.00	μg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1
Chloroform		<1.00	μg/L	1	1
1,1,1-Trichloroethane		<1.00	μg/L	1	1
1,1-Dichloropropene		<1.00	μg/L	1	1
Benzene		<1.00	μg/L	1	1
Carbon Tetrachloride		<1.00	μg/L	1	1
1,2-Dichloropropane		<1.00	μg/L	1	1
Trichloroethene (TCE)		<1.00	μg/L	1	1
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1
Bromodichloromethane		<1.00	μg/L	1	1
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5
cis-1,3-Dichloropropene		<1.00	μg/L	1	1
trans-1,3-Dichloropropene		<1.00	μg/L	1	1
Toluene		<1.00	μg/L	1	1
1,1,2-Trichloroethane		<1.00	μg/L	1	1
1,3-Dichloropropane		<1.00	μg/L	1	1
Dibromochloromethane		<1.00	μg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1
Tetrachloroethene (PCE)		<1.00	μg/L	1	1
Chlorobenzene		<1.00	μg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1
Ethylbenzene		<1.00	μg/L	1	1
m,p-Xylene		<1.00	μg/L	1	1
Bromoform		<1.00	μg/L	1	1
Styrene		<1.00	μg/L	1	1
o-Xylene		<1.00	μg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1
2-Chlorotoluene		<1.00	μg/L	1	1
1,2,3-Trichloropropane		<1.00	μg/L	1	1
Isopropylbenzene		<1.00	μg/L	1	1
Bromobenzene		<1.00	μg/L	1	1
n-Propylbenzene		<1.00	μg/L	1	1
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1
tert-Butylbenzene		<1.00	μg/L	1	1
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1
sec-Butylbenzene		<1.00	μg/L	1	1
1,3-Dichlorobenzene		<1.00	μg/L	1	1
p-Isopropyltoluene		<1.00	μg/L	1	1
4-Chlorotoluene		<1.00	μg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1
n-Butylbenzene		<1.00	μg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5
Naphthalene		<5.00	μg/L	1	5
Hexachlorobutadiene		<5.00	μg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.01	μg/L	1	50	98	85 - 117
Toluene-d8		50.64	μg/L	1	50	101	93 - 109
4-Bromofluorobenzene		49.08	μg/L	1	50	98	76 - 109

Sample: 163947 - 0143-HMW11-0101

Analysis:	8260	Analytical Method:	S 8260B	QC Batch:	QC09038	Date Analyzed:	2/8/01
Analyst:	JG	Preparation Method:	E 5030B	Prep Batch:	PB07785	Date Prepared:	2/8/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	μg/L	1	1
Dichlorodifluoromethane		<1.00	μg/L	1	1
Chloromethane (methyl chloride)		<1.00	μg/L	1	1
Vinyl Chloride		<1.00	μg/L	1	1
Bromomethane (methyl bromide)		<1.00	μg/L	1	1
Chloroethane		<1.00	μg/L	1	1
Trichlorofluoromethane		<1.00	μg/L	1	1
Acetone		<10.0	μg/L	1	10
Iodomethane (methyl iodide)		<1.00	μg/L	1	1
Carbon Disulfide		<1.00	μg/L	1	1
Acrylonitrile		<1.00	μg/L	1	1
2-Butanone (MEK)		<5.00	μg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5
2-hexanone		<5.00	μg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10
1,1-Dichloroethene		1.09	μg/L	1	1
Methylene chloride		<5.00	μg/L	1	5
MTBE		<1.00	μg/L	1	1
trans-1,2-Dichloroethene		<1.00	μg/L	1	1
1,1-Dichloroethane		2.12	μg/L	1	1
cis-1,2-dichloroethene		<1.00	μg/L	1	1
2,2-Dichloropropane		<1.00	μg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1
Chloroform		1.61	μg/L	1	1
1,1,1-Trichloroethane		<1.00	μg/L	1	1
1,1-Dichloropropene		<1.00	μg/L	1	1
Benzene		<1.00	μg/L	1	1
Carbon Tetrachloride		<1.00	μg/L	1	1
1,2-Dichloropropane		<1.00	μg/L	1	1
Trichloroethene (TCE)		53.0	μg/L	1	1
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1
Bromodichloromethane		<1.00	μg/L	1	1
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5
cis-1,3-Dichloropropene		<1.00	μg/L	1	1
trans-1,3-Dichloropropene		<1.00	μg/L	1	1
Toluene		<1.00	μg/L	1	1
1,1,2-Trichloroethane		<1.00	μg/L	1	1
1,3-Dichloropropane		<1.00	μg/L	1	1
Dibromochloromethane		<1.00	μg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1
Tetrachloroethene (PCE)		<1.00	μg/L	1	1
Chlorobenzene		<1.00	μg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1
Ethylbenzene		<1.00	μg/L	1	1

Continued ...

... *Continued* Sample: 163947 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
m,p-Xylene		<1.00	µg/L	1	1
Bromoform		<1.00	µg/L	1	1
Styrene		<1.00	µg/L	1	1
o-Xylene		<1.00	µg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1
2-Chlorotoluene		<1.00	µg/L	1	1
1,2,3-Trichloropropane		<1.00	µg/L	1	1
Isopropylbenzene		<1.00	µg/L	1	1
Bromobenzene		<1.00	µg/L	1	1
n-Propylbenzene		<1.00	µg/L	1	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1
tert-Butylbenzene		<1.00	µg/L	1	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1
sec-Butylbenzene		<1.00	µg/L	1	1
1,3-Dichlorobenzene		<1.00	µg/L	1	1
p-Isopropyltoluene		<1.00	µg/L	1	1
4-Chlorotoluene		<1.00	µg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1
n-Butylbenzene		<1.00	µg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<5.00	µg/L	1	5
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.00	µg/L	1	50	98	85 - 117
Toluene-d8		50.73	µg/L	1	50	101	93 - 109
4-Bromofluorobenzene		49.16	µg/L	1	50	98	76 - 109

Sample: 163948 - 0143-HMW11-0101-TB

Analysis:	8260	Analytical Method:	S 8260B	QC Batch:	QC09038	Date Analyzed:	2/8/01
Analyst:	JG	Preparation Method:	E 5030B	Prep Batch:	PB07785	Date Prepared:	2/8/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1
Chloromethane (methyl chloride)		<1.00	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<1.00	µg/L	1	1
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<1.00	µg/L	1	1
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5

Continued ...

... *Continued* Sample: 163948 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10
1,1-Dichloroethene		<1.00	μg/L	1	1
Methylene chloride		<5.00	μg/L	1	5
MTBE		<1.00	μg/L	1	1
trans-1,2-Dichloroethene		<1.00	μg/L	1	1
1,1-Dichloroethane		<1.00	μg/L	1	1
cis-1,2-dichloroethene		<1.00	μg/L	1	1
2,2-Dichloropropane		<1.00	μg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1
Chloroform		<1.00	μg/L	1	1
1,1,1-Trichloroethane		<1.00	μg/L	1	1
1,1-Dichloropropene		<1.00	μg/L	1	1
Benzene		<1.00	μg/L	1	1
Carbon Tetrachloride		<1.00	μg/L	1	1
1,2-Dichloropropane		<1.00	μg/L	1	1
Trichloroethene (TCE)		<1.00	μg/L	1	1
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1
Bromodichloromethane		<1.00	μg/L	1	1
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5
cis-1,3-Dichloropropene		<1.00	μg/L	1	1
trans-1,3-Dichloropropene		<1.00	μg/L	1	1
Toluene		<1.00	μg/L	1	1
1,1,2-Trichloroethane		<1.00	μg/L	1	1
1,3-Dichloropropane		<1.00	μg/L	1	1
Dibromochloromethane		<1.00	μg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1
Tetrachloroethene (PCE)		<1.00	μg/L	1	1
Chlorobenzene		<1.00	μg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1
Ethylbenzene		<1.00	μg/L	1	1
m,p-Xylene		<1.00	μg/L	1	1
Bromoform		<1.00	μg/L	1	1
Styrene		<1.00	μg/L	1	1
o-Xylene		<1.00	μg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1
2-Chlorotoluene		<1.00	μg/L	1	1
1,2,3-Trichloropropane		<1.00	μg/L	1	1
Isopropylbenzene		<1.00	μg/L	1	1
Bromobenzene		<1.00	μg/L	1	1
n-Propylbenzene		<1.00	μg/L	1	1
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1
tert-Butylbenzene		<1.00	μg/L	1	1
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1
sec-Butylbenzene		<1.00	μg/L	1	1
1,3-Dichlorobenzene		<1.00	μg/L	1	1
p-Isopropyltoluene		<1.00	μg/L	1	1
4-Chlorotoluene		<1.00	μg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1
n-Butylbenzene		<1.00	μg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5
Naphthalene		<5.00	μg/L	1	5

Continued ...

... *Continued* Sample: 163948 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
Hexachlorobutadiene		<5.00	μg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.81	μg/L	1	50	99	85 - 117
Toluene-d8		52.17	μg/L	1	50	104	93 - 109
4-Bromofluorobenzene		46.82	μg/L	1	50	93	76 - 109

Sample: 163949 - 0143-HMW43-0101

Analysis:	8260	Analytical Method:	S 8260B	QC Batch:	QC09038	Date Analyzed:	2/8/01
Analyst:	JG	Preparation Method:	E 5030B	Prep Batch:	PB07785	Date Prepared:	2/8/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	μg/L	1	1
Dichlorodifluoromethane		<1.00	μg/L	1	1
Chloromethane (methyl chloride)		<1.00	μg/L	1	1
Vinyl Chloride		<1.00	μg/L	1	1
Bromomethane (methyl bromide)		<1.00	μg/L	1	1
Chloroethane		<1.00	μg/L	1	1
Trichlorofluoromethane		<1.00	μg/L	1	1
Acetone		<10.0	μg/L	1	10
Iodomethane (methyl iodide)		<1.00	μg/L	1	1
Carbon Disulfide		<1.00	μg/L	1	1
Acrylonitrile		<1.00	μg/L	1	1
2-Butanone (MEK)		<5.00	μg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5
2-hexanone		<5.00	μg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10
1,1-Dichloroethene		<1.00	μg/L	1	1
Methylene chloride		<5.00	μg/L	1	5
MTBE		<1.00	μg/L	1	1
trans-1,2-Dichloroethene		<1.00	μg/L	1	1
1,1-Dichloroethane		<1.00	μg/L	1	1
cis-1,2-dichloroethene		<1.00	μg/L	1	1
2,2-Dichloropropane		<1.00	μg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1
Chloroform		<1.00	μg/L	1	1
1,1,1-Trichloroethane		<1.00	μg/L	1	1
1,1-Dichloropropene		<1.00	μg/L	1	1
Benzene		<1.00	μg/L	1	1
Carbon Tetrachloride		<1.00	μg/L	1	1
1,2-Dichloropropane		<1.00	μg/L	1	1
Trichloroethene (TCE)		<1.00	μg/L	1	1
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1
Bromodichloromethane		<1.00	μg/L	1	1
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5
cis-1,3-Dichloropropene		<1.00	μg/L	1	1
trans-1,3-Dichloropropene		<1.00	μg/L	1	1
Toluene		<1.00	μg/L	1	1
1,1,2-Trichloroethane		<1.00	μg/L	1	1
1,3-Dichloropropane		<1.00	μg/L	1	1

Continued ...

... *Continued* Sample: 163949 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
Dibromochloromethane		<1.00	µg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1
Tetrachloroethene (PCE)		<1.00	µg/L	1	1
Chlorobenzene		<1.00	µg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1
Ethylbenzene		<1.00	µg/L	1	1
m,p-Xylene		<1.00	µg/L	1	1
Bromoform		<1.00	µg/L	1	1
Styrene		<1.00	µg/L	1	1
o-Xylene		<1.00	µg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1
2-Chlorotoluene		<1.00	µg/L	1	1
1,2,3-Trichloropropane		<1.00	µg/L	1	1
Isopropylbenzene		<1.00	µg/L	1	1
Bromobenzene		<1.00	µg/L	1	1
n-Propylbenzene		<1.00	µg/L	1	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1
tert-Butylbenzene		<1.00	µg/L	1	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1
sec-Butylbenzene		<1.00	µg/L	1	1
1,3-Dichlorobenzene		<1.00	µg/L	1	1
p-Isopropyltoluene		<1.00	µg/L	1	1
4-Chlorotoluene		<1.00	µg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1
n-Butylbenzene		<1.00	µg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<5.00	µg/L	1	5
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.51	µg/L	1	50	101	85 - 117
Toluene-d8		49.95	µg/L	1	50	99	93 - 109
4-Bromofluorobenzene		49.53	µg/L	1	50	99	76 - 109

Sample: 163950 - 0143-HMW43-0101-TB

Analysis:	8260	Analytical Method:	S 8260B	QC Batch:	QC09038	Date Analyzed:	2/8/01
Analyst:	JG	Preparation Method:	E 5030B	Prep Batch:	PB07785	Date Prepared:	2/8/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1
Chloromethane (methyl chloride)		<1.00	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<1.00	µg/L	1	1
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10

Continued ...

... *Continued* Sample: 163950 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
Iodomethane (methyl iodide)		<1.00	μg/L	1	1
Carbon Disulfide		<1.00	μg/L	1	1
Acrylonitrile		<1.00	μg/L	1	1
2-Butanone (MEK)		<5.00	μg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5
2-hexanone		<5.00	μg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10
1,1-Dichloroethene		<1.00	μg/L	1	1
Methylene chloride		<5.00	μg/L	1	5
MTBE		<1.00	μg/L	1	1
trans-1,2-Dichloroethene		<1.00	μg/L	1	1
1,1-Dichloroethane		<1.00	μg/L	1	1
cis-1,2-dichloroethene		<1.00	μg/L	1	1
2,2-Dichloropropane		<1.00	μg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1
Chloroform		<1.00	μg/L	1	1
1,1,1-Trichloroethane		<1.00	μg/L	1	1
1,1-Dichloropropene		<1.00	μg/L	1	1
Benzene		<1.00	μg/L	1	1
Carbon Tetrachloride		<1.00	μg/L	1	1
1,2-Dichloropropane		<1.00	μg/L	1	1
Trichloroethene (TCE)		<1.00	μg/L	1	1
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1
Bromodichloromethane		<1.00	μg/L	1	1
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5
cis-1,3-Dichloropropene		<1.00	μg/L	1	1
trans-1,3-Dichloropropene		<1.00	μg/L	1	1
Toluene		<1.00	μg/L	1	1
1,1,2-Trichloroethane		<1.00	μg/L	1	1
1,3-Dichloropropane		<1.00	μg/L	1	1
Dibromochloromethane		<1.00	μg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1
Tetrachloroethene (PCE)		<1.00	μg/L	1	1
Chlorobenzene		<1.00	μg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1
Ethylbenzene		<1.00	μg/L	1	1
m,p-Xylene		<1.00	μg/L	1	1
Bromoform		<1.00	μg/L	1	1
Styrene		<1.00	μg/L	1	1
o-Xylene		<1.00	μg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1
2-Chlorotoluene		<1.00	μg/L	1	1
1,2,3-Trichloropropane		<1.00	μg/L	1	1
Isopropylbenzene		<1.00	μg/L	1	1
Bromobenzene		<1.00	μg/L	1	1
n-Propylbenzene		<1.00	μg/L	1	1
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1
tert-Butylbenzene		<1.00	μg/L	1	1
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1
sec-Butylbenzene		<1.00	μg/L	1	1
1,3-Dichlorobenzene		<1.00	μg/L	1	1
p-Isopropyltoluene		<1.00	μg/L	1	1
4-Chlorotoluene		<1.00	μg/L	1	1

Continued ...

... Continued Sample: 163950 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1
n-Butylbenzene		<1.00	μg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5
Naphthalene		<5.00	μg/L	1	5
Hexachlorobutadiene		<5.00	μg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.34	μg/L	1	50	98	85 - 117
Toluene-d8		51.92	μg/L	1	50	103	93 - 109
4-Bromofluorobenzene		47.57	μg/L	1	50	95	76 - 109

Sample: 163951 - 0143-HMW13-0101

Analysis:	8260	Analytical Method:	S 8260B	QC Batch:	QC09038	Date Analyzed:	2/8/01
Analyst:	JG	Preparation Method:	E 5030B	Prep Batch:	PB07785	Date Prepared:	2/8/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	μg/L	1	1
Dichlorodifluoromethane		<1.00	μg/L	1	1
Chloromethane (methyl chloride)		<1.00	μg/L	1	1
Vinyl Chloride		<1.00	μg/L	1	1
Bromomethane (methyl bromide)		<1.00	μg/L	1	1
Chloroethane		<1.00	μg/L	1	1
Trichlorofluoromethane		<1.00	μg/L	1	1
Acetone		<10.0	μg/L	1	10
Iodomethane (methyl iodide)		<1.00	μg/L	1	1
Carbon Disulfide		<1.00	μg/L	1	1
Acrylonitrile		<1.00	μg/L	1	1
2-Butanone (MEK)		<5.00	μg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5
2-hexanone		<5.00	μg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10
1,1-Dichloroethene		<1.00	μg/L	1	1
Methylene chloride		<5.00	μg/L	1	5
MTBE		<1.00	μg/L	1	1
trans-1,2-Dichloroethene		<1.00	μg/L	1	1
1,1-Dichloroethane		<1.00	μg/L	1	1
cis-1,2-dichloroethene		<1.00	μg/L	1	1
2,2-Dichloropropane		<1.00	μg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1
Chloroform		1.89	μg/L	1	1
1,1,1-Trichloroethane		<1.00	μg/L	1	1
1,1-Dichloropropene		<1.00	μg/L	1	1
Benzene		<1.00	μg/L	1	1
Carbon Tetrachloride		<1.00	μg/L	1	1
1,2-Dichloropropane		<1.00	μg/L	1	1
Trichloroethene (TCE)		<1.00	μg/L	1	1
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1
Bromodichloromethane		<1.00	μg/L	1	1

Continued ...

... *Continued* Sample: 163951 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5
cis-1,3-Dichloropropene		<1.00	μg/L	1	1
trans-1,3-Dichloropropene		<1.00	μg/L	1	1
Toluene		<1.00	μg/L	1	1
1,1,2-Trichloroethane		<1.00	μg/L	1	1
1,3-Dichloropropane		<1.00	μg/L	1	1
Dibromochloromethane		<1.00	μg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1
Tetrachloroethene (PCE)		<1.00	μg/L	1	1
Chlorobenzene		<1.00	μg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1
Ethylbenzene		<1.00	μg/L	1	1
m,p-Xylene		<1.00	μg/L	1	1
Bromoform		<1.00	μg/L	1	1
Styrene		<1.00	μg/L	1	1
o-Xylene		<1.00	μg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1
2-Chlorotoluene		<1.00	μg/L	1	1
1,2,3-Trichloropropane		<1.00	μg/L	1	1
Isopropylbenzene		<1.00	μg/L	1	1
Bromobenzene		<1.00	μg/L	1	1
n-Propylbenzene		<1.00	μg/L	1	1
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1
tert-Butylbenzene		<1.00	μg/L	1	1
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1
sec-Butylbenzene		<1.00	μg/L	1	1
1,3-Dichlorobenzene		<1.00	μg/L	1	1
p-Isopropyltoluene		<1.00	μg/L	1	1
4-Chlorotoluene		<1.00	μg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1
n-Butylbenzene		<1.00	μg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5
Naphthalene		<5.00	μg/L	1	5
Hexachlorobutadiene		<5.00	μg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.30	μg/L	1	50	100	85 - 117
Toluene-d8		50.77	μg/L	1	50	101	93 - 109
4-Bromofluorobenzene		49.16	μg/L	1	50	98	76 - 109

Sample: 163952 - 0143-HMW13-0101-TB

Analysis:	8260	Analytical Method:	S 8260B	QC Batch:	QC09038	Date Analyzed:	2/8/01
Analyst:	JG	Preparation Method:	E 5030B	Prep Batch:	PB07785	Date Prepared:	2/8/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	μg/L	1	1
Dichlorodifluoromethane		<1.00	μg/L	1	1

Continued ...

... *Continued* Sample: 163952 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
Chloromethane (methyl chloride)		<1.00	μg/L	1	1
Vinyl Chloride		<1.00	μg/L	1	1
Bromomethane (methyl bromide)		<1.00	μg/L	1	1
Chloroethane		<1.00	μg/L	1	1
Trichlorofluoromethane		<1.00	μg/L	1	1
Acetone		<10.0	μg/L	1	10
Iodomethane (methyl iodide)		<1.00	μg/L	1	1
Carbon Disulfide		<1.00	μg/L	1	1
Acrylonitrile		<1.00	μg/L	1	1
2-Butanone (MEK)		<5.00	μg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5
2-hexanone		<5.00	μg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10
1,1-Dichloroethene		<1.00	μg/L	1	1
Methylene chloride		<5.00	μg/L	1	5
MTBE		<1.00	μg/L	1	1
trans-1,2-Dichloroethene		<1.00	μg/L	1	1
1,1-Dichloroethane		<1.00	μg/L	1	1
cis-1,2-dichloroethene		<1.00	μg/L	1	1
2,2-Dichloropropane		<1.00	μg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1
Chloroform		<1.00	μg/L	1	1
1,1,1-Trichloroethane		<1.00	μg/L	1	1
1,1-Dichloropropene		<1.00	μg/L	1	1
Benzene		<1.00	μg/L	1	1
Carbon Tetrachloride		<1.00	μg/L	1	1
1,2-Dichloropropane		<1.00	μg/L	1	1
Trichloroethene (TCE)		<1.00	μg/L	1	1
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1
Bromodichloromethane		<1.00	μg/L	1	1
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5
cis-1,3-Dichloropropene		<1.00	μg/L	1	1
trans-1,3-Dichloropropene		<1.00	μg/L	1	1
Toluene		<1.00	μg/L	1	1
1,1,2-Trichloroethane		<1.00	μg/L	1	1
1,3-Dichloropropane		<1.00	μg/L	1	1
Dibromochloromethane		<1.00	μg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1
Tetrachloroethene (PCE)		<1.00	μg/L	1	1
Chlorobenzene		<1.00	μg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1
Ethylbenzene		<1.00	μg/L	1	1
m,p-Xylene		<1.00	μg/L	1	1
Bromoform		<1.00	μg/L	1	1
Styrene		<1.00	μg/L	1	1
o-Xylene		<1.00	μg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1
2-Chlorotoluene		<1.00	μg/L	1	1
1,2,3-Trichloropropane		<1.00	μg/L	1	1
Isopropylbenzene		<1.00	μg/L	1	1
Bromobenzene		<1.00	μg/L	1	1
n-Propylbenzene		<1.00	μg/L	1	1
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1
tert-Butylbenzene		<1.00	μg/L	1	1

Continued ...

... Continued Sample: 163952 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1
sec-Butylbenzene		<1.00	µg/L	1	1
1,3-Dichlorobenzene		<1.00	µg/L	1	1
p-Isopropyltoluene		<1.00	µg/L	1	1
4-Chlorotoluene		<1.00	µg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1
n-Butylbenzene		<1.00	µg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<5.00	µg/L	1	5
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.82	µg/L	1	50	101	85 - 117
Toluene-d8		51.31	µg/L	1	50	102	93 - 109
4-Bromofluorobenzene		48.57	µg/L	1	50	97	76 - 109

Sample: 164014 - 0143-HMW38-0101

Analysis:	8260	Analytical Method:	S 8260B	QC Batch:	QC09041	Date Analyzed:	2/9/01
Analyst:	JG	Preparation Method:	E 5030B	Prep Batch:	PB07787	Date Prepared:	2/9/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1
Chloromethane (methyl chloride)		<1.00	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<1.00	µg/L	1	1
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<1.00	µg/L	1	1
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<1.00	µg/L	1	1
Methylene chloride		<5.00	µg/L	1	5
MTBE		<1.00	µg/L	1	1
trans-1,2-Dichloroethene		<1.00	µg/L	1	1
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-dichloroethene		<1.00	µg/L	1	1
2,2-Dichloropropane		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1
Chloroform		<1.00	µg/L	1	1
1,1,1-Trichloroethane		<1.00	µg/L	1	1
1,1-Dichloropropene		<1.00	µg/L	1	1

Continued ...

... *Continued* Sample: 164014 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
Benzene		<1.00	μg/L	1	1
Carbon Tetrachloride		<1.00	μg/L	1	1
1,2-Dichloropropane		<1.00	μg/L	1	1
Trichloroethene (TCE)		12.8	μg/L	1	1
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1
Bromodichloromethane		<1.00	μg/L	1	1
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5
cis-1,3-Dichloropropene		<1.00	μg/L	1	1
trans-1,3-Dichloropropene		<1.00	μg/L	1	1
Toluene		<1.00	μg/L	1	1
1,1,2-Trichloroethane		<1.00	μg/L	1	1
1,3-Dichloropropane		<1.00	μg/L	1	1
Dibromochloromethane		<1.00	μg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1
Tetrachloroethene (PCE)		<1.00	μg/L	1	1
Chlorobenzene		<1.00	μg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1
Ethylbenzene		<1.00	μg/L	1	1
m,p-Xylene		<1.00	μg/L	1	1
Bromoform		<1.00	μg/L	1	1
Styrene		<1.00	μg/L	1	1
o-Xylene		<1.00	μg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1
2-Chlorotoluene		<1.00	μg/L	1	1
1,2,3-Trichloropropane		<1.00	μg/L	1	1
Isopropylbenzene		<1.00	μg/L	1	1
Bromobenzene		<1.00	μg/L	1	1
n-Propylbenzene		<1.00	μg/L	1	1
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1
tert-Butylbenzene		<1.00	μg/L	1	1
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1
sec-Butylbenzene		<1.00	μg/L	1	1
1,3-Dichlorobenzene		<1.00	μg/L	1	1
p-Isopropyltoluene		<1.00	μg/L	1	1
4-Chlorotoluene		<1.00	μg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1
n-Butylbenzene		<1.00	μg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5
Naphthalene		<5.00	μg/L	1	5
Hexachlorobutadiene		<5.00	μg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.28	μg/L	1	50	102	85 - 117
Toluene-d8		51.00	μg/L	1	50	102	93 - 109
4-Bromofluorobenzene		48.43	μg/L	1	50	96	76 - 109

Sample: 164015 - 0143-HMW38-0101-TB

Analysis:	8260	Analytical Method:	S 8260B	QC Batch:	QC09041	Date Analyzed:	2/9/01
Analyst:	JG	Preparation Method:	E 5030B	Prep Batch:	PB07787	Date Prepared:	2/9/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	μg/L	1	1
Dichlorodifluoromethane		<1.00	μg/L	1	1
Chloromethane (methyl chloride)		<1.00	μg/L	1	1
Vinyl Chloride		<1.00	μg/L	1	1
Bromomethane (methyl bromide)		<1.00	μg/L	1	1
Chloroethane		<1.00	μg/L	1	1
Trichlorofluoromethane		<1.00	μg/L	1	1
Acetone		<10.0	μg/L	1	10
Iodomethane (methyl iodide)		<1.00	μg/L	1	1
Carbon Disulfide		<1.00	μg/L	1	1
Acrylonitrile		<1.00	μg/L	1	1
2-Butanone (MEK)		<5.00	μg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5
2-hexanone		<5.00	μg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10
1,1-Dichloroethene		<1.00	μg/L	1	1
Methylene chloride		<5.00	μg/L	1	5
MTBE		<1.00	μg/L	1	1
trans-1,2-Dichloroethene		<1.00	μg/L	1	1
1,1-Dichloroethane		<1.00	μg/L	1	1
cis-1,2-dichloroethene		<1.00	μg/L	1	1
2,2-Dichloropropane		<1.00	μg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1
Chloroform		<1.00	μg/L	1	1
1,1,1-Trichloroethane		<1.00	μg/L	1	1
1,1-Dichloropropene		<1.00	μg/L	1	1
Benzene		<1.00	μg/L	1	1
Carbon Tetrachloride		<1.00	μg/L	1	1
1,2-Dichloropropane		<1.00	μg/L	1	1
Trichloroethene (TCE)		<1.00	μg/L	1	1
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1
Bromodichloromethane		<1.00	μg/L	1	1
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5
cis-1,3-Dichloropropene		<1.00	μg/L	1	1
trans-1,3-Dichloropropene		<1.00	μg/L	1	1
Toluene		<1.00	μg/L	1	1
1,1,2-Trichloroethane		<1.00	μg/L	1	1
1,3-Dichloropropane		<1.00	μg/L	1	1
Dibromochloromethane		<1.00	μg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1
Tetrachloroethene (PCE)		<1.00	μg/L	1	1
Chlorobenzene		<1.00	μg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1
Ethylbenzene		<1.00	μg/L	1	1
m,p-Xylene		<1.00	μg/L	1	1
Bromoform		<1.00	μg/L	1	1
Styrene		<1.00	μg/L	1	1
o-Xylene		<1.00	μg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1
2-Chlorotoluene		<1.00	μg/L	1	1
1,2,3-Trichloropropane		<1.00	μg/L	1	1

Continued ...

... *Continued* Sample: 164015 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
Isopropylbenzene		<1.00	μg/L	1	1
Bromobenzene		<1.00	μg/L	1	1
n-Propylbenzene		<1.00	μg/L	1	1
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1
tert-Butylbenzene		<1.00	μg/L	1	1
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1
sec-Butylbenzene		<1.00	μg/L	1	1
1,3-Dichlorobenzene		<1.00	μg/L	1	1
p-Isopropyltoluene		<1.00	μg/L	1	1
4-Chlorotoluene		<1.00	μg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1
n-Butylbenzene		<1.00	μg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5
Naphthalene		<5.00	μg/L	1	5
Hexachlorobutadiene		<5.00	μg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.48	μg/L	1	50	100	85 - 117
Toluene-d8		53.11	μg/L	1	50	106	93 - 109
4-Bromofluorobenzene		46.98	μg/L	1	50	93	76 - 109

Sample: 164016 - 0143-HMW37-0101

Analysis:	8260	Analytical Method:	S 8260B	QC Batch:	QC09041	Date Analyzed:	2/9/01
Analyst:	JG	Preparation Method:	E 5030B	Prep Batch:	PB07787	Date Prepared:	2/9/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	μg/L	1	1
Dichlorodifluoromethane		<1.00	μg/L	1	1
Chloromethane (methyl chloride)		<1.00	μg/L	1	1
Vinyl Chloride		<1.00	μg/L	1	1
Bromomethane (methyl bromide)		<1.00	μg/L	1	1
Chloroethane		<1.00	μg/L	1	1
Trichlorofluoromethane		<1.00	μg/L	1	1
Acetone		<10.0	μg/L	1	10
Iodomethane (methyl iodide)		<1.00	μg/L	1	1
Carbon Disulfide		<1.00	μg/L	1	1
Acrylonitrile		<1.00	μg/L	1	1
2-Butanone (MEK)		<5.00	μg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5
2-hexanone		<5.00	μg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10
1,1-Dichloroethene		<1.00	μg/L	1	1
Methylene chloride		<5.00	μg/L	1	5
MTBE		<1.00	μg/L	1	1
trans-1,2-Dichloroethene		<1.00	μg/L	1	1
1,1-Dichloroethane		<1.00	μg/L	1	1
cis-1,2-dichloroethene		<1.00	μg/L	1	1

Continued ...

... *Continued* Sample: 164016 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
2,2-Dichloropropane		<1.00	μg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1
Chloroform		1.29	μg/L	1	1
1,1,1-Trichloroethane		<1.00	μg/L	1	1
1,1-Dichloropropene		<1.00	μg/L	1	1
Benzene		<1.00	μg/L	1	1
Carbon Tetrachloride		<1.00	μg/L	1	1
1,2-Dichloropropane		<1.00	μg/L	1	1
Trichloroethene (TCE)		<1.00	μg/L	1	1
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1
Bromodichloromethane		<1.00	μg/L	1	1
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5
cis-1,3-Dichloropropene		<1.00	μg/L	1	1
trans-1,3-Dichloropropene		<1.00	μg/L	1	1
Toluene		<1.00	μg/L	1	1
1,1,2-Trichloroethane		<1.00	μg/L	1	1
1,3-Dichloropropane		<1.00	μg/L	1	1
Dibromochloromethane		<1.00	μg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1
Tetrachloroethene (PCE)		<1.00	μg/L	1	1
Chlorobenzene		<1.00	μg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1
Ethylbenzene		<1.00	μg/L	1	1
m,p-Xylene		<1.00	μg/L	1	1
Bromoform		<1.00	μg/L	1	1
Styrene		<1.00	μg/L	1	1
o-Xylene		<1.00	μg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1
2-Chlorotoluene		<1.00	μg/L	1	1
1,2,3-Trichloropropane		<1.00	μg/L	1	1
Isopropylbenzene		<1.00	μg/L	1	1
Bromobenzene		<1.00	μg/L	1	1
n-Propylbenzene		<1.00	μg/L	1	1
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1
tert-Butylbenzene		<1.00	μg/L	1	1
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1
sec-Butylbenzene		<1.00	μg/L	1	1
1,3-Dichlorobenzene		<1.00	μg/L	1	1
p-Isopropyltoluene		<1.00	μg/L	1	1
4-Chlorotoluene		<1.00	μg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1
n-Butylbenzene		<1.00	μg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5
Naphthalene		<5.00	μg/L	1	5
Hexachlorobutadiene		<5.00	μg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.17	μg/L	1	50	102	85 - 117
Toluene-d8		52.82	μg/L	1	50	105	93 - 109
4-Bromofluorobenzene		45.83	μg/L	1	50	91	76 - 109

Sample: 164017 - 0143-HMW37-0101-TB

Analysis:	8260	Analytical Method:	S 8260B	QC Batch:	QC09041	Date Analyzed:	2/9/01
Analyst:	JG	Preparation Method:	E 5030B	Prep Batch:	PB07787	Date Prepared:	2/9/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	μg/L	1	1
Dichlorodifluoromethane		<1.00	μg/L	1	1
Chloromethane (methyl chloride)		<1.00	μg/L	1	1
Vinyl Chloride		<1.00	μg/L	1	1
Bromomethane (methyl bromide)		<1.00	μg/L	1	1
Chloroethane		<1.00	μg/L	1	1
Trichlorofluoromethane		<1.00	μg/L	1	1
Acetone		<10.0	μg/L	1	10
Iodomethane (methyl iodide)		<1.00	μg/L	1	1
Carbon Disulfide		<1.00	μg/L	1	1
Acrylonitrile		<1.00	μg/L	1	1
2-Butanone (MEK)		<5.00	μg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5
2-hexanone		<5.00	μg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10
1,1-Dichloroethene		<1.00	μg/L	1	1
Methylene chloride		<5.00	μg/L	1	5
MTBE		<1.00	μg/L	1	1
trans-1,2-Dichloroethene		<1.00	μg/L	1	1
1,1-Dichloroethane		<1.00	μg/L	1	1
cis-1,2-dichloroethene		<1.00	μg/L	1	1
2,2-Dichloropropane		<1.00	μg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1
Chloroform		<1.00	μg/L	1	1
1,1,1-Trichloroethane		<1.00	μg/L	1	1
1,1-Dichloropropene		<1.00	μg/L	1	1
Benzene		<1.00	μg/L	1	1
Carbon Tetrachloride		<1.00	μg/L	1	1
1,2-Dichloropropane		<1.00	μg/L	1	1
Trichloroethene (TCE)		<1.00	μg/L	1	1
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1
Bromodichloromethane		<1.00	μg/L	1	1
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5
cis-1,3-Dichloropropene		<1.00	μg/L	1	1
trans-1,3-Dichloropropene		<1.00	μg/L	1	1
Toluene		<1.00	μg/L	1	1
1,1,2-Trichloroethane		<1.00	μg/L	1	1
1,3-Dichloropropane		<1.00	μg/L	1	1
Dibromochloromethane		<1.00	μg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1
Tetrachloroethene (PCE)		<1.00	μg/L	1	1
Chlorobenzene		<1.00	μg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1
Ethylbenzene		<1.00	μg/L	1	1
m,p-Xylene		<1.00	μg/L	1	1
Bromoform		<1.00	μg/L	1	1
Styrene		<1.00	μg/L	1	1
o-Xylene		<1.00	μg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1
2-Chlorotoluene		<1.00	μg/L	1	1
1,2,3-Trichloropropane		<1.00	μg/L	1	1

Continued ...

... *Continued* Sample: 164017 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
Isopropylbenzene		<1.00	µg/L	1	1
Bromobenzene		<1.00	µg/L	1	1
n-Propylbenzene		<1.00	µg/L	1	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1
tert-Butylbenzene		<1.00	µg/L	1	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1
sec-Butylbenzene		<1.00	µg/L	1	1
1,3-Dichlorobenzene		<1.00	µg/L	1	1
p-Isopropyltoluene		<1.00	µg/L	1	1
4-Chlorotoluene		<1.00	µg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1
n-Butylbenzene		<1.00	µg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<5.00	µg/L	1	5
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.11	µg/L	1	50	102	85 - 117
Toluene-d8		51.25	µg/L	1	50	102	93 - 109
4-Bromofluorobenzene		48.25	µg/L	1	50	96	76 - 109

Sample: 164115 - 0143-HMW39-0101

Analysis:	8260	Analytical Method:	S 8260B	QC Batch:	QC09041	Date Analyzed:	2/9/01
Analyst:	JG	Preparation Method:	E 5030B	Prep Batch:	PB07787	Date Prepared:	2/9/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1
Chloromethane (methyl chloride)		<1.00	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<1.00	µg/L	1	1
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<1.00	µg/L	1	1
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		2.22	µg/L	1	1
Methylene chloride		<5.00	µg/L	1	5
MTBE		<1.00	µg/L	1	1
trans-1,2-Dichloroethene		<1.00	µg/L	1	1
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-Dichloroethene		<1.00	µg/L	1	1

Continued ...

... *Continued* Sample: 164115 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
2,2-Dichloropropane		<1.00	μg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1
Chloroform		2.32	μg/L	1	1
1,1,1-Trichloroethane		<1.00	μg/L	1	1
1,1-Dichloropropene		<1.00	μg/L	1	1
Benzene		<1.00	μg/L	1	1
Carbon Tetrachloride		<1.00	μg/L	1	1
1,2-Dichloropropane		<1.00	μg/L	1	1
Trichloroethene (TCE)		76.7	μg/L	1	1
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1
Bromodichloromethane		<1.00	μg/L	1	1
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5
cis-1,3-Dichloropropene		<1.00	μg/L	1	1
trans-1,3-Dichloropropene		<1.00	μg/L	1	1
Toluene		<1.00	μg/L	1	1
1,1,2-Trichloroethane		<1.00	μg/L	1	1
1,3-Dichloropropane		<1.00	μg/L	1	1
Dibromochloromethane		<1.00	μg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1
Tetrachloroethene (PCE)		<1.00	μg/L	1	1
Chlorobenzene		<1.00	μg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1
Ethylbenzene		<1.00	μg/L	1	1
m,p-Xylene		<1.00	μg/L	1	1
Bromoform		<1.00	μg/L	1	1
Styrene		<1.00	μg/L	1	1
o-Xylene		<1.00	μg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1
2-Chlorotoluene		<1.00	μg/L	1	1
1,2,3-Trichloropropane		<1.00	μg/L	1	1
Isopropylbenzene		<1.00	μg/L	1	1
Bromobenzene		<1.00	μg/L	1	1
n-Propylbenzene		<1.00	μg/L	1	1
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1
tert-Butylbenzene		<1.00	μg/L	1	1
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1
sec-Butylbenzene		<1.00	μg/L	1	1
1,3-Dichlorobenzene		<1.00	μg/L	1	1
p-Isopropyltoluene		<1.00	μg/L	1	1
4-Chlorotoluene		<1.00	μg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1
n-Butylbenzene		<1.00	μg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5
Naphthalene		<5.00	μg/L	1	5
Hexachlorobutadiene		<5.00	μg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.09	μg/L	1	50	106	85 - 117
Toluene-d8		51.03	μg/L	1	50	102	93 - 109
4-Bromofluorobenzene		48.85	μg/L	1	50	97	76 - 109

Sample: 164116 - 0143-HW39-0101-TB

Analysis:	8260	Analytical Method:	S 8260B	QC Batch:	QC09041	Date Analyzed:	2/9/01
Analyst:	JG	Preparation Method:	E 5030B	Prep Batch:	PB07787	Date Prepared:	2/9/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	μg/L	1	1
Dichlorodifluoromethane		<1.00	μg/L	1	1
Chloromethane (methyl chloride)		<1.00	μg/L	1	1
Vinyl Chloride		<1.00	μg/L	1	1
Bromomethane (methyl bromide)		<1.00	μg/L	1	1
Chloroethane		<1.00	μg/L	1	1
Trichlorofluoromethane		<1.00	μg/L	1	1
Acetone		<10.0	μg/L	1	10
Iodomethane (methyl iodide)		<1.00	μg/L	1	1
Carbon Disulfide		<1.00	μg/L	1	1
Acrylonitrile		<1.00	μg/L	1	1
2-Butanone (MEK)		<5.00	μg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5
2-hexanone		<5.00	μg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10
1,1-Dichloroethene		<1.00	μg/L	1	1
Methylene chloride		<5.00	μg/L	1	5
MTBE		<1.00	μg/L	1	1
trans-1,2-Dichloroethene		<1.00	μg/L	1	1
1,1-Dichloroethane		<1.00	μg/L	1	1
cis-1,2-Dichloroethene		<1.00	μg/L	1	1
2,2-Dichloropropane		<1.00	μg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1
Chloroform		<1.00	μg/L	1	1
1,1,1-Trichloroethane		<1.00	μg/L	1	1
1,1-Dichloropropene		<1.00	μg/L	1	1
Benzene		<1.00	μg/L	1	1
Carbon Tetrachloride		<1.00	μg/L	1	1
1,2-Dichloropropane		<1.00	μg/L	1	1
Trichloroethene (TCE)		<1.00	μg/L	1	1
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1
Bromodichloromethane		<1.00	μg/L	1	1
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5
cis-1,3-Dichloropropene		<1.00	μg/L	1	1
trans-1,3-Dichloropropene		<1.00	μg/L	1	1
Toluene		<1.00	μg/L	1	1
1,1,2-Trichloroethane		<1.00	μg/L	1	1
1,3-Dichloropropane		<1.00	μg/L	1	1
Dibromochloromethane		<1.00	μg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1
Tetrachloroethene (PCE)		<1.00	μg/L	1	1
Chlorobenzene		<1.00	μg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1
Ethylbenzene		<1.00	μg/L	1	1
m,p-Xylene		<1.00	μg/L	1	1
Bromoform		<1.00	μg/L	1	1
Styrene		<1.00	μg/L	1	1
o-Xylene		<1.00	μg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1
2-Chlorotoluene		<1.00	μg/L	1	1
1,2,3-Trichloropropane		<1.00	μg/L	1	1

Continued ...

... *Continued* Sample: 164116 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
Isopropylbenzene		<1.00	μg/L	1	1
Bromobenzene		<1.00	μg/L	1	1
n-Propylbenzene		<1.00	μg/L	1	1
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1
tert-Butylbenzene		<1.00	μg/L	1	1
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1
sec-Butylbenzene		<1.00	μg/L	1	1
1,3-Dichlorobenzene		<1.00	μg/L	1	1
p-Isopropyltoluene		<1.00	μg/L	1	1
4-Chlorotoluene		<1.00	μg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1
n-Butylbenzene		<1.00	μg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5
Naphthalene		<5.00	μg/L	1	5
Hexachlorobutadiene		<5.00	μg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.05	μg/L	1	50	104	85 - 117
Toluene-d8		50.95	μg/L	1	50	101	93 - 109
4-Bromofluorobenzene		50.10	μg/L	1	50	100	76 - 109

Sample: 164117 - 0143-HMW36-0101

Analysis:	8260	Analytical Method:	S 8260B	QC Batch:	QC09041	Date Analyzed:	2/9/01
Analyst:	JG	Preparation Method:	E 5030B	Prep Batch:	PB07787	Date Prepared:	2/9/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	μg/L	1	1
Dichlorodifluoromethane		<1.00	μg/L	1	1
Chloromethane (methyl chloride)		<1.00	μg/L	1	1
Vinyl Chloride		<1.00	μg/L	1	1
Bromomethane (methyl bromide)		<1.00	μg/L	1	1
Chloroethane		<1.00	μg/L	1	1
Trichlorofluoromethane		<1.00	μg/L	1	1
Acetone		<10.0	μg/L	1	10
Iodomethane (methyl iodide)		<1.00	μg/L	1	1
Carbon Disulfide		<1.00	μg/L	1	1
Acrylonitrile		<1.00	μg/L	1	1
2-Butanone (MEK)		<5.00	μg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5
2-hexanone		<5.00	μg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10
1,1-Dichloroethene		<1.00	μg/L	1	1
Methylene chloride		<5.00	μg/L	1	5
MTBE		<1.00	μg/L	1	1
trans-1,2-Dichloroethene		<1.00	μg/L	1	1
1,1-Dichloroethane		12.9	μg/L	1	1
cis-1,2-Dichloroethene		<1.00	μg/L	1	1

Continued ...

... *Continued* Sample: 164117 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
2,2-Dichloropropane		<1.00	μg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1
Chloroform		1.29	μg/L	1	1
1,1,1-Trichloroethane		<1.00	μg/L	1	1
1,1-Dichloropropene		<1.00	μg/L	1	1
Benzene		<1.00	μg/L	1	1
Carbon Tetrachloride		<1.00	μg/L	1	1
1,2-Dichloropropane		<1.00	μg/L	1	1
Trichloroethene (TCE)		<1.00	μg/L	1	1
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1
Bromodichloromethane		<1.00	μg/L	1	1
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5
cis-1,3-Dichloropropene		<1.00	μg/L	1	1
trans-1,3-Dichloropropene		<1.00	μg/L	1	1
Toluene		<1.00	μg/L	1	1
1,1,2-Trichloroethane		<1.00	μg/L	1	1
1,3-Dichloropropane		<1.00	μg/L	1	1
Dibromochloromethane		<1.00	μg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1
Tetrachloroethene (PCE)		<1.00	μg/L	1	1
Chlorobenzene		<1.00	μg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1
Ethylbenzene		<1.00	μg/L	1	1
m,p-Xylene		<1.00	μg/L	1	1
Bromoform		<1.00	μg/L	1	1
Styrene		<1.00	μg/L	1	1
o-Xylene		<1.00	μg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1
2-Chlorotoluene		<1.00	μg/L	1	1
1,2,3-Trichloropropane		<1.00	μg/L	1	1
Isopropylbenzene		2.67	μg/L	1	1
Bromobenzene		<1.00	μg/L	1	1
n-Propylbenzene		<1.00	μg/L	1	1
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1
tert-Butylbenzene		<1.00	μg/L	1	1
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1
sec-Butylbenzene		2.35	μg/L	1	1
1,3-Dichlorobenzene		<1.00	μg/L	1	1
p-Isopropyltoluene		<1.00	μg/L	1	1
4-Chlorotoluene		<1.00	μg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1
n-Butylbenzene		<1.00	μg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5
Naphthalene	[1]	6.80	μg/L	1	5
Hexachlorobutadiene		<5.00	μg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.80	μg/L	1	50	107	85 - 117

Continued ...

[1]estimated concentration, RSD value above 15% on initial calibration

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Toluene-d8		48.29	µg/L	1	50	96	93 - 109
4-Bromofluorobenzene		52.85	µg/L	1	50	105	76 - 109

Sample: 164118 - 0143-HMW36-0101-TB

Analysis:	8260	Analytical Method:	S 8260B	QC Batch:	QC09041	Date Analyzed:	2/9/01
Analyst:	JG	Preparation Method:	E 5030B	Prep Batch:	PB07787	Date Prepared:	2/9/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1
Chloromethane (methyl chloride)		<1.00	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<1.00	µg/L	1	1
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<1.00	µg/L	1	1
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<1.00	µg/L	1	1
Methylene chloride		<5.00	µg/L	1	5
MTBE		<1.00	µg/L	1	1
trans-1,2-Dichloroethene		<1.00	µg/L	1	1
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-Dichloroethene		<1.00	µg/L	1	1
2,2-Dichloropropane		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1
Chloroform		<1.00	µg/L	1	1
1,1,1-Trichloroethane		<1.00	µg/L	1	1
1,1-Dichloropropene		<1.00	µg/L	1	1
Benzene		<1.00	µg/L	1	1
Carbon Tetrachloride		<1.00	µg/L	1	1
1,2-Dichloropropane		<1.00	µg/L	1	1
Trichloroethene (TCE)		<1.00	µg/L	1	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1
Bromodichloromethane		<1.00	µg/L	1	1
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5
cis-1,3-Dichloropropene		<1.00	µg/L	1	1
trans-1,3-Dichloropropene		<1.00	µg/L	1	1
Toluene		<1.00	µg/L	1	1
1,1,2-Trichloroethane		<1.00	µg/L	1	1
1,3-Dichloropropane		<1.00	µg/L	1	1
Dibromochloromethane		<1.00	µg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1
Tetrachloroethene (PCE)		<1.00	µg/L	1	1
Chlorobenzene		<1.00	µg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1
Ethylbenzene		<1.00	µg/L	1	1
m,p-Xylene		<1.00	µg/L	1	1

Continued ...

... *Continued* Sample: 164118 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
Bromoform		<1.00	μg/L	1	1
Styrene		<1.00	μg/L	1	1
o-Xylene		<1.00	μg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1
2-Chlorotoluene		<1.00	μg/L	1	1
1,2,3-Trichloropropane		<1.00	μg/L	1	1
Isopropylbenzene		<1.00	μg/L	1	1
Bromobenzene		<1.00	μg/L	1	1
n-Propylbenzene		<1.00	μg/L	1	1
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1
tert-Butylbenzene		<1.00	μg/L	1	1
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1
sec-Butylbenzene		<1.00	μg/L	1	1
1,3-Dichlorobenzene		<1.00	μg/L	1	1
p-Isopropyltoluene		<1.00	μg/L	1	1
4-Chlorotoluene		<1.00	μg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1
n-Butylbenzene		<1.00	μg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5
Naphthalene		<5.00	μg/L	1	5
Hexachlorobutadiene		<5.00	μg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.00	μg/L	1	50	104	85 - 117
Toluene-d8		50.78	μg/L	1	50	101	93 - 109
4-Bromofluorobenzene		49.15	μg/L	1	50	98	76 - 109

Sample: 164119 - 0143-HMW39-0101-QC

Analysis:	8260	Analytical Method:	S 8260B	QC Batch:	QC09041	Date Analyzed:	2/9/01
Analyst:	JG	Preparation Method:	E 5030B	Prep Batch:	PB07787	Date Prepared:	2/9/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	μg/L	1	1
Dichlorodifluoromethane		<1.00	μg/L	1	1
Chloromethane (methyl chloride)		<1.00	μg/L	1	1
Vinyl Chloride		<1.00	μg/L	1	1
Bromomethane (methyl bromide)		<1.00	μg/L	1	1
Chloroethane		<1.00	μg/L	1	1
Trichlorofluoromethane		<1.00	μg/L	1	1
Acetone		<10.0	μg/L	1	10
Iodomethane (methyl iodide)		<1.00	μg/L	1	1
Carbon Disulfide		<1.00	μg/L	1	1
Acrylonitrile		<1.00	μg/L	1	1
2-Butanone (MEK)		<5.00	μg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5
2-hexanone		<5.00	μg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10

Continued ...

... *Continued* Sample: 164119 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
1,1-Dichloroethene		2.28	μg/L	1	1
Methylene chloride		<5.00	μg/L	1	5
MTBE		<1.00	μg/L	1	1
trans-1,2-Dichloroethene		<1.00	μg/L	1	1
1,1-Dichloroethane		<1.00	μg/L	1	1
cis-1,2-Dichloroethene		<1.00	μg/L	1	1
2,2-Dichloropropane		<1.00	μg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1
Chloroform		2.27	μg/L	1	1
1,1,1-Trichloroethane		<1.00	μg/L	1	1
1,1-Dichloropropene		<1.00	μg/L	1	1
Benzene		<1.00	μg/L	1	1
Carbon Tetrachloride		<1.00	μg/L	1	1
1,2-Dichloropropane		<1.00	μg/L	1	1
Trichloroethene (TCE)		77.7	μg/L	1	1
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1
Bromodichloromethane		<1.00	μg/L	1	1
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5
cis-1,3-Dichloropropene		<1.00	μg/L	1	1
trans-1,3-Dichloropropene		<1.00	μg/L	1	1
Toluene		<1.00	μg/L	1	1
1,1,2-Trichloroethane		<1.00	μg/L	1	1
1,3-Dichloropropane		<1.00	μg/L	1	1
Dibromochloromethane		<1.00	μg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1
Tetrachloroethene (PCE)		<1.00	μg/L	1	1
Chlorobenzene		<1.00	μg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1
Ethylbenzene		<1.00	μg/L	1	1
m,p-Xylene		<1.00	μg/L	1	1
Bromoform		<1.00	μg/L	1	1
Styrene		<1.00	μg/L	1	1
o-Xylene		<1.00	μg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1
2-Chlorotoluene		<1.00	μg/L	1	1
1,2,3-Trichloropropane		<1.00	μg/L	1	1
Isopropylbenzene		<1.00	μg/L	1	1
Bromobenzene		<1.00	μg/L	1	1
n-Propylbenzene		<1.00	μg/L	1	1
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1
tert-Butylbenzene		<1.00	μg/L	1	1
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1
sec-Butylbenzene		<1.00	μg/L	1	1
1,3-Dichlorobenzene		<1.00	μg/L	1	1
p-Isopropyltoluene		<1.00	μg/L	1	1
4-Chlorotoluene		<1.00	μg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1
n-Butylbenzene		<1.00	μg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5
Naphthalene		<5.00	μg/L	1	5
Hexachlorobutadiene		<5.00	μg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.77	μg/L	1	50	105	85 - 117
Toluene-d8		50.48	μg/L	1	50	100	93 - 109
4-Bromofluorobenzene		49.03	μg/L	1	50	98	76 - 109

Sample: 164120 - 0143-HMW39-0101-QC-TB

Analysis:	8260	Analytical Method:	S 8260B	QC Batch:	QC09041	Date Analyzed:	2/9/01
Analyst:	JG	Preparation Method:	E 5030B	Prep Batch:	PB07787	Date Prepared:	2/9/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	μg/L	1	1
Dichlorodifluoromethane		<1.00	μg/L	1	1
Chloromethane (methyl chloride)		<1.00	μg/L	1	1
Vinyl Chloride		<1.00	μg/L	1	1
Bromomethane (methyl bromide)		<1.00	μg/L	1	1
Chloroethane		<1.00	μg/L	1	1
Trichlorofluoromethane		<1.00	μg/L	1	1
Acetone		<10.0	μg/L	1	10
Iodomethane (methyl iodide)		<1.00	μg/L	1	1
Carbon Disulfide		<1.00	μg/L	1	1
Acrylonitrile		<1.00	μg/L	1	1
2-Butanone (MEK)		<5.00	μg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5
2-hexanone		<5.00	μg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10
1,1-Dichloroethene		<1.00	μg/L	1	1
Methylene chloride		<5.00	μg/L	1	5
MTBE		<1.00	μg/L	1	1
trans-1,2-Dichloroethene		<1.00	μg/L	1	1
1,1-Dichloroethane		<1.00	μg/L	1	1
cis-1,2-Dichloroethene		<1.00	μg/L	1	1
2,2-Dichloropropane		<1.00	μg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1
Chloroform		<1.00	μg/L	1	1
1,1,1-Trichloroethane		<1.00	μg/L	1	1
1,1-Dichloropropene		<1.00	μg/L	1	1
Benzene		<1.00	μg/L	1	1
Carbon Tetrachloride		<1.00	μg/L	1	1
1,2-Dichloropropane		<1.00	μg/L	1	1
Trichloroethene (TCE)		<1.00	μg/L	1	1
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1
Bromodichloromethane		<1.00	μg/L	1	1
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5
cis-1,3-Dichloropropene		<1.00	μg/L	1	1
trans-1,3-Dichloropropene		<1.00	μg/L	1	1
Toluene		<1.00	μg/L	1	1
1,1,2-Trichloroethane		<1.00	μg/L	1	1
1,3-Dichloropropane		<1.00	μg/L	1	1
Dibromochloromethane		<1.00	μg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1
Tetrachloroethene (PCE)		<1.00	μg/L	1	1
Chlorobenzene		<1.00	μg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1
Ethylbenzene		<1.00	μg/L	1	1

Continued ...

... *Continued* Sample: 164120 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
m,p-Xylene		<1.00	μg/L	1	1
Bromoform		<1.00	μg/L	1	1
Styrene		<1.00	μg/L	1	1
o-Xylene		<1.00	μg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1
2-Chlorotoluene		<1.00	μg/L	1	1
1,2,3-Trichloropropane		<1.00	μg/L	1	1
Isopropylbenzene		<1.00	μg/L	1	1
Bromobenzene		<1.00	μg/L	1	1
n-Propylbenzene		<1.00	μg/L	1	1
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1
tert-Butylbenzene		<1.00	μg/L	1	1
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1
sec-Butylbenzene		<1.00	μg/L	1	1
1,3-Dichlorobenzene		<1.00	μg/L	1	1
p-Isopropyltoluene		<1.00	μg/L	1	1
4-Chlorotoluene		<1.00	μg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1
n-Butylbenzene		<1.00	μg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5
Naphthalene		<5.00	μg/L	1	5
Hexachlorobutadiene		<5.00	μg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.24	μg/L	1	50	104	85 - 117
Toluene-d8		50.73	μg/L	1	50	101	93 - 109
4-Bromofluorobenzene		49.11	μg/L	1	50	98	76 - 109

Sample: 164121 - 0143-HMW40-0101

Analysis:	8260	Analytical Method:	S 8260B	QC Batch:	QC09041	Date Analyzed:	2/9/01
Analyst:	JG	Preparation Method:	E 5030B	Prep Batch:	PB07787	Date Prepared:	2/9/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	μg/L	1	1
Dichlorodifluoromethane		<1.00	μg/L	1	1
Chloromethane (methyl chloride)		<1.00	μg/L	1	1
Vinyl Chloride		<1.00	μg/L	1	1
Bromomethane (methyl bromide)		<1.00	μg/L	1	1
Chloroethane		<1.00	μg/L	1	1
Trichlorofluoromethane		<1.00	μg/L	1	1
Acetone		<10.0	μg/L	1	10
Iodomethane (methyl iodide)		<1.00	μg/L	1	1
Carbon Disulfide		<1.00	μg/L	1	1
Acrylonitrile		<1.00	μg/L	1	1
2-Butanone (MEK)		<5.00	μg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5
2-hexanone		<5.00	μg/L	1	5

Continued ...

... *Continued* Sample: 164121 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10
1,1-Dichloroethene		<1.00	μg/L	1	1
Methylene chloride		<5.00	μg/L	1	5
MTBE		<1.00	μg/L	1	1
trans-1,2-Dichloroethene		<1.00	μg/L	1	1
1,1-Dichloroethane		<1.00	μg/L	1	1
cis-1,2-Dichloroethene		<1.00	μg/L	1	1
2,2-Dichloropropane		<1.00	μg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1
Chloroform		<1.00	μg/L	1	1
1,1,1-Trichloroethane		<1.00	μg/L	1	1
1,1-Dichloropropene		<1.00	μg/L	1	1
Benzene		<1.00	μg/L	1	1
Carbon Tetrachloride		<1.00	μg/L	1	1
1,2-Dichloropropane		<1.00	μg/L	1	1
Trichloroethene (TCE)		<1.00	μg/L	1	1
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1
Bromodichloromethane		<1.00	μg/L	1	1
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5
cis-1,3-Dichloropropene		<1.00	μg/L	1	1
trans-1,3-Dichloropropene		<1.00	μg/L	1	1
Toluene		<1.00	μg/L	1	1
1,1,2-Trichloroethane		<1.00	μg/L	1	1
1,3-Dichloropropane		<1.00	μg/L	1	1
Dibromochloromethane		<1.00	μg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1
Tetrachloroethene (PCE)		<1.00	μg/L	1	1
Chlorobenzene		<1.00	μg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1
Ethylbenzene		<1.00	μg/L	1	1
m,p-Xylene		<1.00	μg/L	1	1
Bromoform		<1.00	μg/L	1	1
Styrene		<1.00	μg/L	1	1
o-Xylene		<1.00	μg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1
2-Chlorotoluene		<1.00	μg/L	1	1
1,2,3-Trichloropropane		<1.00	μg/L	1	1
Isopropylbenzene		<1.00	μg/L	1	1
Bromobenzene		<1.00	μg/L	1	1
n-Propylbenzene		<1.00	μg/L	1	1
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1
tert-Butylbenzene		<1.00	μg/L	1	1
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1
sec-Butylbenzene		<1.00	μg/L	1	1
1,3-Dichlorobenzene		<1.00	μg/L	1	1
p-Isopropyltoluene		<1.00	μg/L	1	1
4-Chlorotoluene		<1.00	μg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1
n-Butylbenzene		<1.00	μg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5
Naphthalene		<5.00	μg/L	1	5

Continued ...

... *Continued* Sample: 164121 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
Hexachlorobutadiene		<5.00	μg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		54.52	μg/L	1	50	109	85 - 117
Toluene-d8		49.66	μg/L	1	50	99	93 - 109
4-Bromofluorobenzene		49.13	μg/L	1	50	98	76 - 109

Sample: 164122 - 0143-HMW40-0101-TB

Analysis:	8260	Analytical Method:	S 8260B	QC Batch:	QC09125	Date Analyzed:	2/12/01
Analyst:	JG	Preparation Method:	E 5030B	Prep Batch:	PB07855	Date Prepared:	2/12/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	μg/L	1	1
Dichlorodifluoromethane		<1.00	μg/L	1	1
Chloromethane (methyl chloride)		<1.00	μg/L	1	1
Vinyl Chloride		<1.00	μg/L	1	1
Bromomethane (methyl bromide)		<1.00	μg/L	1	1
Chloroethane		<1.00	μg/L	1	1
Trichlorofluoromethane		<1.00	μg/L	1	1
Acetone		<10.0	μg/L	1	10
Iodomethane (methyl iodide)		<1.00	μg/L	1	1
Carbon Disulfide		<1.00	μg/L	1	1
Acrylonitrile		<1.00	μg/L	1	1
2-Butanone (MEK)		<5.00	μg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5
2-hexanone		<5.00	μg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10
1,1-Dichloroethene		<1.00	μg/L	1	1
Methylene chloride		<5.00	μg/L	1	5
MTBE		<1.00	μg/L	1	1
trans-1,2-Dichloroethene		<1.00	μg/L	1	1
1,1-Dichloroethane		<1.00	μg/L	1	1
cis-1,2-Dichloroethene		<1.00	μg/L	1	1
2,2-Dichloropropane		<1.00	μg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1
Chloroform		<1.00	μg/L	1	1
1,1,1-Trichloroethane		<1.00	μg/L	1	1
1,1-Dichloropropene		<1.00	μg/L	1	1
Benzene		<1.00	μg/L	1	1
Carbon Tetrachloride		<1.00	μg/L	1	1
1,2-Dichloropropane		<1.00	μg/L	1	1
Trichloroethene (TCE)		<1.00	μg/L	1	1
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1
Bromodichloromethane		<1.00	μg/L	1	1
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5
cis-1,3-Dichloropropene		<1.00	μg/L	1	1
trans-1,3-Dichloropropene		<1.00	μg/L	1	1
Toluene		<1.00	μg/L	1	1
1,1,2-Trichloroethane		<1.00	μg/L	1	1
1,3-Dichloropropane		<1.00	μg/L	1	1

Continued ...

... *Continued* Sample: 164122 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
Dibromochloromethane		<1.00	μg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1
Tetrachloroethene (PCE)		<1.00	μg/L	1	1
Chlorobenzene		<1.00	μg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1
Ethylbenzene		<1.00	μg/L	1	1
m,p-Xylene		<1.00	μg/L	1	1
Bromoform		<1.00	μg/L	1	1
Styrene		<1.00	μg/L	1	1
o-Xylene		<1.00	μg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1
2-Chlorotoluene		<1.00	μg/L	1	1
1,2,3-Trichloropropane		<1.00	μg/L	1	1
Isopropylbenzene		<1.00	μg/L	1	1
Bromobenzene		<1.00	μg/L	1	1
n-Propylbenzene		<1.00	μg/L	1	1
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1
tert-Butylbenzene		<1.00	μg/L	1	1
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1
sec-Butylbenzene		<1.00	μg/L	1	1
1,3-Dichlorobenzene		<1.00	μg/L	1	1
p-Isopropyltoluene		<1.00	μg/L	1	1
4-Chlorotoluene		<1.00	μg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1
n-Butylbenzene		<1.00	μg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5
Naphthalene		<5.00	μg/L	1	5
Hexachlorobutadiene		<5.00	μg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.23	μg/L	1	50	106	85 - 117
Toluene-d8		51.60	μg/L	1	50	103	93 - 109
4-Bromofluorobenzene		46.69	μg/L	1	50	93	76 - 109

Sample: 164123 - 0143-HMW41-0101

Analysis:	8260	Analytical Method:	S 8260B	QC Batch:	QC09146	Date Analyzed:	2/14/01
Analyst:	JG	Preparation Method:	E 5030B	Prep Batch:	PB07875	Date Prepared:	2/14/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<10.0	μg/L	10	1
Dichlorodifluoromethane		<10.0	μg/L	10	1
Chloromethane (methyl chloride)		<10.0	μg/L	10	1
Vinyl Chloride		<10.0	μg/L	10	1
Bromomethane (methyl bromide)		<10.0	μg/L	10	1
Chloroethane		<10.0	μg/L	10	1
Trichlorofluoromethane		<10.0	μg/L	10	1
Acetone		<100	μg/L	10	10

Continued ...

... *Continued* Sample: 164123 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
Iodomethane (methyl iodide)		<10.0	μg/L	10	1
Carbon Disulfide		<10.0	μg/L	10	1
Acrylonitrile		<10.0	μg/L	10	1
2-Butanone (MEK)		<50.0	μg/L	10	5
4-methyl-2-pentanone (MIBK)		<50.0	μg/L	10	5
2-hexanone		<50.0	μg/L	10	5
trans 1,4-Dichloro-2-butene		<100	μg/L	10	10
1,1-Dichloroethene		<10.0	μg/L	10	1
Methylene chloride		<50.0	μg/L	10	5
MTBE		<10.0	μg/L	10	1
trans-1,2-Dichloroethene		<10.0	μg/L	10	1
1,1-Dichloroethane		<10.0	μg/L	10	1
cis-1,2-Dichloroethene		<10.0	μg/L	10	1
2,2-Dichloropropane		<10.0	μg/L	10	1
1,2-Dichloroethane (EDC)		<10.0	μg/L	10	1
Chloroform		<10.0	μg/L	10	1
1,1,1-Trichloroethane		<10.0	μg/L	10	1
1,1-Dichloropropene		<10.0	μg/L	10	1
Benzene		<10.0	μg/L	10	1
Carbon Tetrachloride		<10.0	μg/L	10	1
1,2-Dichloropropane		<10.0	μg/L	10	1
Trichloroethene (TCE)		318	μg/L	10	1
Dibromomethane (methylene bromide)		<10.0	μg/L	10	1
Bromodichloromethane		<10.0	μg/L	10	1
2-Chloroethyl vinyl ether		<50.0	μg/L	10	5
cis-1,3-Dichloropropene		<10.0	μg/L	10	1
trans-1,3-Dichloropropene		<10.0	μg/L	10	1
Toluene		<10.0	μg/L	10	1
1,1,2-Trichloroethane		<10.0	μg/L	10	1
1,3-Dichloropropane		<10.0	μg/L	10	1
Dibromochloromethane		<10.0	μg/L	10	1
1,2-Dibromoethane (EDB)		<10.0	μg/L	10	1
Tetrachloroethene (PCE)		<10.0	μg/L	10	1
Chlorobenzene		<10.0	μg/L	10	1
1,1,1,2-Tetrachloroethane		<10.0	μg/L	10	1
Ethylbenzene		<10.0	μg/L	10	1
m,p-Xylene		<10.0	μg/L	10	1
Bromoform		<10.0	μg/L	10	1
Styrene		<10.0	μg/L	10	1
o-Xylene		<10.0	μg/L	10	1
1,1,2,2-Tetrachloroethane		<10.0	μg/L	10	1
2-Chlorotoluene		<10.0	μg/L	10	1
1,2,3-Trichloropropane		<10.0	μg/L	10	1
Isopropylbenzene		<10.0	μg/L	10	1
Bromobenzene		<10.0	μg/L	10	1
n-Propylbenzene		<10.0	μg/L	10	1
1,3,5-Trimethylbenzene		<10.0	μg/L	10	1
tert-Butylbenzene		<10.0	μg/L	10	1
1,2,4-Trimethylbenzene		<10.0	μg/L	10	1
1,4-Dichlorobenzene (para)		<10.0	μg/L	10	1
sec-Butylbenzene		<10.0	μg/L	10	1
1,3-Dichlorobenzene		<10.0	μg/L	10	1
p-Isopropyltoluene		<10.0	μg/L	10	1
4-Chlorotoluene		<10.0	μg/L	10	1

Continued ...

... *Continued* Sample: 164123 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
1,2-Dichlorobenzene (ortho)		<10.0	μg/L	10	1
n-Butylbenzene		<10.0	μg/L	10	1
1,2-Dibromo-3-chloropropane		<50.0	μg/L	10	5
1,2,3-Trichlorobenzene		<50.0	μg/L	10	5
1,2,4-Trichlorobenzene		<50.0	μg/L	10	5
Naphthalene		<50.0	μg/L	10	5
Hexachlorobutadiene		<50.0	μg/L	10	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		54.36	μg/L	10	50	108	85 - 117
Toluene-d8		50.52	μg/L	10	50	101	93 - 109
4-Bromofluorobenzene		46.60	μg/L	10	50	93	76 - 109

Sample: 164124 - 0143-HMW41-0101-TB

Analysis:	8260	Analytical Method:	S 8260B	QC Batch:	QC09125	Date Analyzed:	2/12/01
Analyst:	JG	Preparation Method:	E 5030B	Prep Batch:	PB07855	Date Prepared:	2/12/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	μg/L	1	1
Dichlorodifluoromethane		<1.00	μg/L	1	1
Chloromethane (methyl chloride)		<1.00	μg/L	1	1
Vinyl Chloride		<1.00	μg/L	1	1
Bromomethane (methyl bromide)		<1.00	μg/L	1	1
Chloroethane		<1.00	μg/L	1	1
Trichlorofluoromethane		<1.00	μg/L	1	1
Acetone		<10.0	μg/L	1	10
Iodomethane (methyl iodide)		<1.00	μg/L	1	1
Carbon Disulfide		<1.00	μg/L	1	1
Acrylonitrile		<1.00	μg/L	1	1
2-Butanone (MEK)		<5.00	μg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	μg/L	1	5
2-hexanone		<5.00	μg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	μg/L	1	10
1,1-Dichloroethene		<1.00	μg/L	1	1
Methylene chloride		<5.00	μg/L	1	5
MTBE		<1.00	μg/L	1	1
trans-1,2-Dichloroethene		<1.00	μg/L	1	1
1,1-Dichloroethane		<1.00	μg/L	1	1
cis-1,2-Dichloroethene		<1.00	μg/L	1	1
2,2-Dichloropropane		<1.00	μg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	μg/L	1	1
Chloroform		<1.00	μg/L	1	1
1,1,1-Trichloroethane		<1.00	μg/L	1	1
1,1-Dichloropropene		<1.00	μg/L	1	1
Benzene		<1.00	μg/L	1	1
Carbon Tetrachloride		<1.00	μg/L	1	1
1,2-Dichloropropane		<1.00	μg/L	1	1
Trichloroethene (TCE)		<1.00	μg/L	1	1
Dibromomethane (methylene bromide)		<1.00	μg/L	1	1
Bromodichloromethane		<1.00	μg/L	1	1

Continued ...

... *Continued* Sample: 164124 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
2-Chloroethyl vinyl ether		<5.00	μg/L	1	5
cis-1,3-Dichloropropene		<1.00	μg/L	1	1
trans-1,3-Dichloropropene		<1.00	μg/L	1	1
Toluene		<1.00	μg/L	1	1
1,1,2-Trichloroethane		<1.00	μg/L	1	1
1,3-Dichloropropane		<1.00	μg/L	1	1
Dibromochloromethane		<1.00	μg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	μg/L	1	1
Tetrachloroethene (PCE)		<1.00	μg/L	1	1
Chlorobenzene		<1.00	μg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1	1
Ethylbenzene		<1.00	μg/L	1	1
m,p-Xylene		<1.00	μg/L	1	1
Bromoform		<1.00	μg/L	1	1
Styrene		<1.00	μg/L	1	1
o-Xylene		<1.00	μg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1	1
2-Chlorotoluene		<1.00	μg/L	1	1
1,2,3-Trichloropropane		<1.00	μg/L	1	1
Isopropylbenzene		<1.00	μg/L	1	1
Bromobenzene		<1.00	μg/L	1	1
n-Propylbenzene		<1.00	μg/L	1	1
1,3,5-Trimethylbenzene		<1.00	μg/L	1	1
tert-Butylbenzene		<1.00	μg/L	1	1
1,2,4-Trimethylbenzene		<1.00	μg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	μg/L	1	1
sec-Butylbenzene		<1.00	μg/L	1	1
1,3-Dichlorobenzene		<1.00	μg/L	1	1
p-Isopropyltoluene		<1.00	μg/L	1	1
4-Chlorotoluene		<1.00	μg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1	1
n-Butylbenzene		<1.00	μg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	μg/L	1	5
1,2,3-Trichlorobenzene		<5.00	μg/L	1	5
1,2,4-Trichlorobenzene		<5.00	μg/L	1	5
Naphthalene		<5.00	μg/L	1	5
Hexachlorobutadiene		<5.00	μg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.23	μg/L	1	50	106	85 - 117
Toluene-d8		52.76	μg/L	1	50	105	93 - 109
4-Bromofluorobenzene		45.92	μg/L	1	50	91	76 - 109

Quality Control Report
Method Blank

Method Blank

QCBatch: QC09038

Param	Flag	Results	Units	Reporting Limit
Bromochloromethane		<1.00	μg/L	1
Dichlorodifluoromethane		<1.00	μg/L	1
Chloromethane (methyl chloride)		<1.00	μg/L	1
Vinyl Chloride		<1.00	μg/L	1
Bromomethane (methyl bromide)		<1.00	μg/L	1
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<1.00	μg/L	1
Carbon Disulfide		<1.00	μg/L	1
Acrylonitrile		<1.00	μg/L	1
2-Butanone (MEK)		<5.00	μg/L	5
4-methyl-2-pentanone (MIBK)		<5.00	μg/L	5
2-hexanone		<5.00	μg/L	5
trans 1,4-Dichloro-2-butene		<10.0	μg/L	10
1,1-Dichloroethene		<1.00	μg/L	1
Methylene chloride		<5.00	μg/L	5
MTBE		<1.00	μg/L	1
trans-1,2-Dichloroethene		<1.00	μg/L	1
1,1-Dichloroethane		<1.00	μg/L	1
cis-1,2-Dichloroethene		<1.00	μg/L	1
2,2-Dichloropropane		<1.00	μg/L	1
1,2-Dichloroethane (EDC)		<1.00	μg/L	1
Chloroform		<1.00	μg/L	1
1,1,1-Trichloroethane		<1.00	μg/L	1
1,1-Dichloropropene		<1.00	μg/L	1
Benzene		<1.00	μg/L	1
Carbon Tetrachloride		<1.00	μg/L	1
1,2-Dichloropropane		<1.00	μg/L	1
Trichloroethene (TCE)		<1.00	μg/L	1
Dibromomethane (methylene bromide)		<1.00	μg/L	1
Bromodichloromethane		<1.00	μg/L	1
2-Chloroethyl vinyl ether		<5.00	μg/L	5
cis-1,3-Dichloropropene		<1.00	μg/L	1
trans-1,3-Dichloropropene		<1.00	μg/L	1
Toluene		<1.00	μg/L	1
1,1,2-Trichloroethane		<1.00	μg/L	1
1,3-Dichloropropane		<1.00	μg/L	1
Dibromochloromethane		<1.00	μg/L	1
1,2-Dibromoethane (EDB)		<1.00	μg/L	1
Tetrachloroethene (PCE)		<1.00	μg/L	1
Chlorobenzene		<1.00	μg/L	1
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1
Ethylbenzene		<1.00	μg/L	1
m,p-Xylene		<1.00	μg/L	1
Bromoform		<1.00	μg/L	1
Styrene		<1.00	μg/L	1
o-Xylene		<1.00	μg/L	1

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Param	Flag	Results	Units	Reporting Limit
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1
2-Chlorotoluene		<1.00	μg/L	1
1,2,3-Trichloropropane		<1.00	μg/L	1
Isopropylbenzene		<1.00	μg/L	1
Bromobenzene		<1.00	μg/L	1
n-Propylbenzene		<1.00	μg/L	1
1,3,5-Trimethylbenzene		<1.00	μg/L	1
tert-Butylbenzene		<1.00	μg/L	1
1,2,4-Trimethylbenzene		<1.00	μg/L	1
1,4-Dichlorobenzene (para)		<1.00	μg/L	1
sec-Butylbenzene		<1.00	μg/L	1
1,3-Dichlorobenzene		<1.00	μg/L	1
p-Isopropyltoluene		<1.00	μg/L	1
4-Chlorotoluene		<1.00	μg/L	1
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1
n-Butylbenzene		<1.00	μg/L	1
1,2-Dibromo-3-chloropropane		<5.00	μg/L	5
1,2,3-Trichlorobenzene		<5.00	μg/L	5
1,2,4-Trichlorobenzene		<5.00	μg/L	5
Naphthalene		<5.00	μg/L	5
Hexachlorobutadiene		<5.00	μg/L	5

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
Dibromofluoromethane		48.97	μg/L	50	97	85 - 117
Toluene-d8		50.51	μg/L	50	101	93 - 109
4-Bromofluorobenzene		48.23	μg/L	50	96	76 - 109

Method Blank QCBatch: QC09041

Param	Flag	Results	Units	Reporting Limit
Bromochloromethane		<1.00	μg/L	1
Dichlorodifluoromethane		<1.00	μg/L	1
Chloromethane (methyl chloride)		<1.00	μg/L	1
Vinyl Chloride		<1.00	μg/L	1
Bromomethane (methyl bromide)		<1.00	μg/L	1
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<1.00	μg/L	1
Carbon Disulfide		<1.00	μg/L	1
Acrylonitrile		<1.00	μg/L	1
2-Butanone (MEK)		<5.00	μg/L	5
4-methyl-2-pentanone (MIBK)		<5.00	μg/L	5
2-hexanone		<5.00	μg/L	5
trans 1,4-Dichloro-2-butene		<10.0	μg/L	10
1,1-Dichloroethene		<1.00	μg/L	1
Methylene chloride		<5.00	μg/L	5
MTBE		<1.00	μg/L	1

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Param	Flag	Results	Units	Reporting Limit
trans-1,2-Dichloroethene		<1.00	μg/L	1
1,1-Dichloroethane		<1.00	μg/L	1
cis-1,2-Dichloroethene		<1.00	μg/L	1
2,2-Dichloropropane		<1.00	μg/L	1
1,2-Dichloroethane (EDC)		<1.00	μg/L	1
Chloroform		<1.00	μg/L	1
1,1,1-Trichloroethane		<1.00	μg/L	1
1,1-Dichloropropene		<1.00	μg/L	1
Benzene		<1.00	μg/L	1
Carbon Tetrachloride		<1.00	μg/L	1
1,2-Dichloropropane		<1.00	μg/L	1
Trichloroethene (TCE)		<1.00	μg/L	1
Dibromomethane (methylene bromide)		<1.00	μg/L	1
Bromodichloromethane		<1.00	μg/L	1
2-Chloroethyl vinyl ether		<5.00	μg/L	5
cis-1,3-Dichloropropene		<1.00	μg/L	1
trans-1,3-Dichloropropene		<1.00	μg/L	1
Toluene		<1.00	μg/L	1
1,1,2-Trichloroethane		<1.00	μg/L	1
1,3-Dichloropropane		<1.00	μg/L	1
Dibromochloromethane		<1.00	μg/L	1
1,2-Dibromoethane (EDB)		<1.00	μg/L	1
Tetrachloroethene (PCE)		<1.00	μg/L	1
Chlorobenzene		<1.00	μg/L	1
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1
Ethylbenzene		<1.00	μg/L	1
m,p-Xylene		<1.00	μg/L	1
Bromoform		<1.00	μg/L	1
Styrene		<1.00	μg/L	1
o-Xylene		<1.00	μg/L	1
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1
2-Chlorotoluene		<1.00	μg/L	1
1,2,3-Trichloropropane		<1.00	μg/L	1
Isopropylbenzene		<1.00	μg/L	1
Bromobenzene		<1.00	μg/L	1
n-Propylbenzene		<1.00	μg/L	1
1,3,5-Trimethylbenzene		<1.00	μg/L	1
tert-Butylbenzene		<1.00	μg/L	1
1,2,4-Trimethylbenzene		<1.00	μg/L	1
1,4-Dichlorobenzene (para)		<1.00	μg/L	1
sec-Butylbenzene		<1.00	μg/L	1
1,3-Dichlorobenzene		<1.00	μg/L	1
p-Isopropyltoluene		<1.00	μg/L	1
4-Chlorotoluene		<1.00	μg/L	1
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1
n-Butylbenzene		<1.00	μg/L	1
1,2-Dibromo-3-chloropropane		<5.00	μg/L	5
1,2,3-Trichlorobenzene		<5.00	μg/L	5
1,2,4-Trichlorobenzene		<5.00	μg/L	5
Naphthalene		<5.00	μg/L	5
Hexachlorobutadiene		<5.00	μg/L	5

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
Dibromofluoromethane		50.79	μg/L	50	101	85 - 117
Toluene-d8		51.38	μg/L	50	102	93 - 109
4-Bromofluorobenzene		47.16	μg/L	50	94	76 - 109

Method Blank QCBatch: QC09125

Param	Flag	Results	Units	Reporting Limit
Bromochloromethane		<1.00	μg/L	1
Dichlorodifluoromethane		<1.00	μg/L	1
Chloromethane (methyl chloride)		<1.00	μg/L	1
Vinyl Chloride		<1.00	μg/L	1
Bromomethane (methyl bromide)		<1.00	μg/L	1
Chloroethane		<1.00	μg/L	1
Trichlorofluoromethane		<1.00	μg/L	1
Acetone		<10.0	μg/L	10
Iodomethane (methyl iodide)		<1.00	μg/L	1
Carbon Disulfide		<1.00	μg/L	1
Acrylonitrile		<1.00	μg/L	1
2-Butanone (MEK)		<5.00	μg/L	5
4-methyl-2-pentanone (MIBK)		<5.00	μg/L	5
2-hexanone		<5.00	μg/L	5
trans 1,4-Dichloro-2-butene		<10.0	μg/L	10
1,1-Dichloroethene		<1.00	μg/L	1
Methylene chloride		<5.00	μg/L	5
MTBE		<1.00	μg/L	1
trans-1,2-Dichloroethene		<1.00	μg/L	1
1,1-Dichloroethane		<1.00	μg/L	1
cis-1,2-Dichloroethene		<1.00	μg/L	1
2,2-Dichloropropane		<1.00	μg/L	1
1,2-Dichloroethane (EDC)		<1.00	μg/L	1
Chloroform		<1.00	μg/L	1
1,1,1-Trichloroethane		<1.00	μg/L	1
1,1-Dichloropropene		<1.00	μg/L	1
Benzene		<1.00	μg/L	1
Carbon Tetrachloride		<1.00	μg/L	1
1,2-Dichloropropane		<1.00	μg/L	1
Trichloroethene (TCE)		<1.00	μg/L	1
Dibromomethane (methylene bromide)		<1.00	μg/L	1
Bromodichloromethane		<1.00	μg/L	1
2-Chloroethyl vinyl ether		<5.00	μg/L	5
cis-1,3-Dichloropropene		<1.00	μg/L	1
trans-1,3-Dichloropropene		<1.00	μg/L	1
Toluene		<1.00	μg/L	1
1,1,2-Trichloroethane		<1.00	μg/L	1
1,3-Dichloropropane		<1.00	μg/L	1
Dibromochloromethane		<1.00	μg/L	1
1,2-Dibromoethane (EDB)		<1.00	μg/L	1
Tetrachloroethene (PCE)		<1.00	μg/L	1
Chlorobenzene		<1.00	μg/L	1
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1
Ethylbenzene		<1.00	μg/L	1

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Param	Flag	Results	Units	Reporting Limit
m,p-Xylene		<1.00	µg/L	1
Bromoform		<1.00	µg/L	1
Styrene		<1.00	µg/L	1
o-Xylene		<1.00	µg/L	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1
2-Chlorotoluene		<1.00	µg/L	1
1,2,3-Trichloropropane		<1.00	µg/L	1
Isopropylbenzene		<1.00	µg/L	1
Bromobenzene		<1.00	µg/L	1
n-Propylbenzene		<1.00	µg/L	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1
tert-Butylbenzene		<1.00	µg/L	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1
sec-Butylbenzene		<1.00	µg/L	1
1,3-Dichlorobenzene		<1.00	µg/L	1
p-Isopropyltoluene		<1.00	µg/L	1
4-Chlorotoluene		<1.00	µg/L	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1
n-Butylbenzene		<1.00	µg/L	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	5
1,2,3-Trichlorobenzene		<5.00	µg/L	5
1,2,4-Trichlorobenzene		<5.00	µg/L	5
Naphthalene		<5.00	µg/L	5
Hexachlorobutadiene		<5.00	µg/L	5

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
Dibromofluoromethane		53.35	µg/L	50	106	85 - 117
Toluene-d8		50.33	µg/L	50	100	93 - 109
4-Bromofluorobenzene		48.36	µg/L	50	96	76 - 109

Method Blank

QCBatch: QC09146

Param	Flag	Results	Units	Reporting Limit
Bromochloromethane		<1.00	µg/L	1
Dichlorodifluoromethane		<1.00	µg/L	1
Chloromethane (methyl chloride)		<1.00	µg/L	1
Vinyl Chloride		<1.00	µg/L	1
Bromomethane (methyl bromide)		<1.00	µg/L	1
Chloroethane		<1.00	µg/L	1
Trichlorofluoromethane		<1.00	µg/L	1
Acetone		<10.0	µg/L	10
Iodomethane (methyl iodide)		<1.00	µg/L	1
Carbon Disulfide		<1.00	µg/L	1
Acrylonitrile		<1.00	µg/L	1
2-Butanone (MEK)		<5.00	µg/L	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	5
2-hexanone		<5.00	µg/L	5

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Param	Flag	Results	Units	Reporting Limit
trans 1,4-Dichloro-2-butene		<10.0	μg/L	10
1,1-Dichloroethene		<1.00	μg/L	1
Methylene chloride		<5.00	μg/L	5
MTBE		<1.00	μg/L	1
trans-1,2-Dichloroethene		<1.00	μg/L	1
1,1-Dichloroethane		<1.00	μg/L	1
cis-1,2-Dichloroethene		<1.00	μg/L	1
2,2-Dichloropropane		<1.00	μg/L	1
1,2-Dichloroethane (EDC)		<1.00	μg/L	1
Chloroform		<1.00	μg/L	1
1,1,1-Trichloroethane		<1.00	μg/L	1
1,1-Dichloropropene		<1.00	μg/L	1
Benzene		<1.00	μg/L	1
Carbon Tetrachloride		<1.00	μg/L	1
1,2-Dichloropropane		<1.00	μg/L	1
Trichloroethene (TCE)		<1.00	μg/L	1
Dibromomethane (methylene bromide)		<1.00	μg/L	1
Bromodichloromethane		<1.00	μg/L	1
2-Chloroethyl vinyl ether		<5.00	μg/L	5
cis-1,3-Dichloropropene		<1.00	μg/L	1
trans-1,3-Dichloropropene		<1.00	μg/L	1
Toluene		<1.00	μg/L	1
1,1,2-Trichloroethane		<1.00	μg/L	1
1,3-Dichloropropane		<1.00	μg/L	1
Dibromochloromethane		<1.00	μg/L	1
1,2-Dibromoethane (EDB)		<1.00	μg/L	1
Tetrachloroethene (PCE)		<1.00	μg/L	1
Chlorobenzene		<1.00	μg/L	1
1,1,1,2-Tetrachloroethane		<1.00	μg/L	1
Ethylbenzene		<1.00	μg/L	1
m,p-Xylene		<1.00	μg/L	1
Bromoform		<1.00	μg/L	1
Styrene		<1.00	μg/L	1
o-Xylene		<1.00	μg/L	1
1,1,2,2-Tetrachloroethane		<1.00	μg/L	1
2-Chlorotoluene		<1.00	μg/L	1
1,2,3-Trichloropropane		<1.00	μg/L	1
Isopropylbenzene		<1.00	μg/L	1
Bromobenzene		<1.00	μg/L	1
n-Propylbenzene		<1.00	μg/L	1
1,3,5-Trimethylbenzene		<1.00	μg/L	1
tert-Butylbenzene		<1.00	μg/L	1
1,2,4-Trimethylbenzene		<1.00	μg/L	1
1,4-Dichlorobenzene (para)		<1.00	μg/L	1
sec-Butylbenzene		<1.00	μg/L	1
1,3-Dichlorobenzene		<1.00	μg/L	1
p-Isopropyltoluene		<1.00	μg/L	1
4-Chlorotoluene		<1.00	μg/L	1
1,2-Dichlorobenzene (ortho)		<1.00	μg/L	1
n-Butylbenzene		<1.00	μg/L	1
1,2-Dibromo-3-chloropropane		<5.00	μg/L	5
1,2,3-Trichlorobenzene		<5.00	μg/L	5
1,2,4-Trichlorobenzene		<5.00	μg/L	5

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Param	Flag	Results	Units	Reporting Limit
Naphthalene		<5.00	μg/L	5
Hexachlorobutadiene		<5.00	μg/L	5

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
Dibromofluoromethane		54.13	μg/L	50	108	85 - 117
Toluene-d8		50.21	μg/L	50	100	93 - 109
4-Bromofluorobenzene		46.56	μg/L	50	93	76 - 109

Quality Control Report
Lab Control Spikes and Duplicate Spikes

LCS QC Batch: QC09038

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		89	μg/L	1	100	<1.00	89		65 - 147	20
Benzene		85	μg/L	1	100	<1.00	85		79 - 124	20
Trichloroethene (TCE)		78	μg/L	1	100	<1.00	78		80 - 119	20
Toluene		84	μg/L	1	100	<1.00	84		78 - 118	20
Chlorobenzene		85	μg/L	1	100	<1.00	85		85 - 118	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		49.42	μg/L	1	50	98	85 - 117
Toluene-d8		50.28	μg/L	1	50	100	93 - 109
4-Bromofluorobenzene		49.30	μg/L	1	50	98	76 - 109

LCSD QC Batch: QC09038

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		93	μg/L	1	100	<1.00	93	4	65 - 147	20
Benzene		89	μg/L	1	100	<1.00	89	4	79 - 124	20
Trichloroethene (TCE)		81	μg/L	1	100	<1.00	81	4	80 - 119	20
Toluene		87	μg/L	1	100	<1.00	87	4	78 - 118	20
Chlorobenzene		88	μg/L	1	100	<1.00	88	3	85 - 118	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		48.92	μg/L	1	50	97	85 - 117
Toluene-d8		50.22	μg/L	1	50	100	93 - 109

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Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
4-Bromofluorobenzene		48.10	μg/L	1	50	96	76 - 109

LCS QC Batch: QC09041

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		89	μg/L	1	100	<1.00	89		65 - 147	20
Benzene		86	μg/L	1	100	<1.00	86		79 - 124	20
Trichloroethene (TCE)		78	μg/L	1	100	<1.00	78		80 - 119	20
Toluene		84	μg/L	1	100	<1.00	84		78 - 118	20
Chlorobenzene		86	μg/L	1	100	<1.00	86		85 - 118	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		50.78	μg/L	1	50	101	85 - 117
Toluene-d8		49.84	μg/L	1	50	99	93 - 109
4-Bromofluorobenzene		49.78	μg/L	1	50	99	76 - 109

LCSD QC Batch: QC09041

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		90	μg/L	1	100	<1.00	90	1	65 - 147	20
Benzene		86	μg/L	1	100	<1.00	86	0	79 - 124	20
Trichloroethene (TCE)		78	μg/L	1	100	<1.00	78	0	80 - 119	20
Toluene		84	μg/L	1	100	<1.00	84	0	78 - 118	20
Chlorobenzene		86	μg/L	1	100	<1.00	86	0	85 - 118	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		51.64	μg/L	1	50	103	85 - 117
Toluene-d8		50.06	μg/L	1	50	100	93 - 109
4-Bromofluorobenzene		49.94	μg/L	1	50	99	76 - 109

LCS QC Batch: QC09125

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		97	μg/L	1	100	<1.00	97		65 - 147	20
Benzene		91	μg/L	1	100	<1.00	91		79 - 124	20
Trichloroethene (TCE)		85	μg/L	1	100	<1.00	85		80 - 119	20
Toluene		91	μg/L	1	100	<1.00	91		78 - 118	20

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Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Chlorobenzene		90	μg/L	1	100	<1.00	90		85 - 118	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		52.39	μg/L	1	50	104	85 - 117
Toluene-d8		49.24	μg/L	1	50	98	93 - 109
4-Bromofluorobenzene		49.73	μg/L	1	50	99	76 - 109

LCSD QC Batch: QC09125

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		100	μg/L	1	100	<1.00	100	3	65 - 147	20
Benzene		94	μg/L	1	100	<1.00	94	3	79 - 124	20
Trichloroethene (TCE)		88	μg/L	1	100	<1.00	88	3	80 - 119	20
Toluene		92	μg/L	1	100	<1.00	92	1	78 - 118	20
Chlorobenzene		93	μg/L	1	100	<1.00	93	3	85 - 118	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		53.18	μg/L	1	50	106	85 - 117
Toluene-d8		49.19	μg/L	1	50	98	93 - 109
4-Bromofluorobenzene		49.41	μg/L	1	50	98	76 - 109

LCS QC Batch: QC09146

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		91	μg/L	1	100	<1.00	91		65 - 147	20
Benzene		87	μg/L	1	100	<1.00	87		79 - 124	20
Trichloroethene (TCE)		81	μg/L	1	100	<1.00	81		80 - 119	20
Toluene		86	μg/L	1	100	<1.00	86		78 - 118	20
Chlorobenzene		85	μg/L	1	100	<1.00	85		85 - 118	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		53.70	μg/L	1	50	107	85 - 117
Toluene-d8		49.40	μg/L	1	50	98	93 - 109
4-Bromofluorobenzene		49.46	μg/L	1	50	98	76 - 109

LCSD QC Batch: QC09146

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		102	μg/L	1	100	<1.00	102	11	65 - 147	20
Benzene		97	μg/L	1	100	<1.00	97	11	79 - 124	20
Trichloroethene (TCE)		85	μg/L	1	100	<1.00	85	5	80 - 119	20
Toluene		90	μg/L	1	100	<1.00	90	4	78 - 118	20
Chlorobenzene		92	μg/L	1	100	<1.00	92	8	85 - 118	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		48.33	μg/L	1	50	96	85 - 117
Toluene-d8		54.15	μg/L	1	50	108	93 - 109
4-Bromofluorobenzene		43.60	μg/L	1	50	87	76 - 109

Quality Control Report
Continuing Calibration Verification Standards

CCV (1) QC Batch: QC09038

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		μg/L	100	109	109	80 - 120	2/8/01
1,1-Dichloroethene		μg/L	100	100	100	80 - 120	2/8/01
Chloroform		μg/L	100	100	100	80 - 120	2/8/01
1,2-Dichloropropane		μg/L	100	97	97	80 - 120	2/8/01
Toluene		μg/L	100	95	95	80 - 120	2/8/01
Chlorobenzene		μg/L	100	97	97	80 - 120	2/8/01
Ethylbenzene		μg/L	100	97	97	80 - 120	2/8/01
Dibromofluoromethane		μg/L	50	50.44	100	80 - 120	2/8/01
Toluene-d8		μg/L	50	49.18	98	80 - 120	2/8/01
4-Bromofluorobenzene		μg/L	50	52.20	104	80 - 120	2/8/01

CCV (1) QC Batch: QC09041

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		μg/L	100	102	102	80 - 120	2/9/01
1,1-Dichloroethene		μg/L	100	95	95	80 - 120	2/9/01
Chloroform		μg/L	100	105	105	80 - 120	2/9/01
1,2-Dichloropropane		μg/L	100	95	95	80 - 120	2/9/01
Toluene		μg/L	100	95	95	80 - 120	2/9/01
Chlorobenzene		μg/L	100	96	96	80 - 120	2/9/01
Ethylbenzene		μg/L	100	99	99	80 - 120	2/9/01
Dibromofluoromethane		μg/L	50	52.04	104	80 - 120	2/9/01
Toluene-d8		μg/L	50	49.19	98	80 - 120	2/9/01
4-Bromofluorobenzene		μg/L	50	53.94	107	80 - 120	2/9/01

CCV (1) QC Batch: QC09125

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	100	105	105	80 - 120	2/12/01
1,1-Dichloroethene		µg/L	100	99	99	80 - 120	2/12/01
Chloroform		µg/L	100	108	108	80 - 120	2/12/01
1,2-Dichloropropane		µg/L	100	93	93	80 - 120	2/12/01
Toluene		µg/L	100	96	96	80 - 120	2/12/01
Chlorobenzene		µg/L	100	96	96	80 - 120	2/12/01
Ethylbenzene		µg/L	100	100	100	80 - 120	2/12/01
Dibromofluoromethane		µg/L	50	53.54	107	80 - 120	2/12/01
Toluene-d8		µg/L	50	49.17	98	80 - 120	2/12/01
4-Bromofluorobenzene		µg/L	50	53.35	106	80 - 120	2/12/01

CCV (1) QC Batch: QC09146

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	100	107	107	80 - 120	2/14/01
1,1-Dichloroethene		µg/L	100	103	103	80 - 120	2/14/01
Chloroform		µg/L	100	111	111	80 - 120	2/14/01
1,2-Dichloropropane		µg/L	100	93	93	80 - 120	2/14/01
Toluene		µg/L	100	99	99	80 - 120	2/14/01
Chlorobenzene		µg/L	100	97	97	80 - 120	2/14/01
Ethylbenzene		µg/L	100	99	99	80 - 120	2/14/01
Dibromofluoromethane		µg/L	50	54.11	108	80 - 120	2/14/01
Toluene-d8		µg/L	50	48.44	96	80 - 120	2/14/01
4-Bromofluorobenzene		µg/L	50	52.88	105	80 - 120	2/14/01

Semi-Volatile Organic Results and Quality Control

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Karen Costa
Mevatec
P.O. Box 399 Bldg. 126
WSMR, NM 88002

Report Date: March 7, 2001

Order ID Number: A01013023

Project Number: 700 A21
Project Name: Groundwater Sampling HELSTF Chrome Site
Project Location: N/A

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
163945	0143-HMW13-0101-QC	Water	1/29/01	12:35	1/30/01
163947	0143-HMW11-0101	Water	1/29/01	10:29	1/30/01
163949	0143-HMW43-0101	Water	1/29/01	14:02	1/30/01
163951	0143-HMW13-0101	Water	1/29/01	12:35	1/30/01
164014	0143-HMW38-0101	Water	1/30/01	11:28	1/31/01
164016	0143-HMW37-0101	Water	1/30/01	12:00	1/31/01
164115	0143-HMW39-0101	Water	1/31/01	11:57	1/31/01
164117	0143-HMW36-0101	Water	1/31/01	11:10	1/31/01
164119	0143-HMW39-0101-QC	Water	1/31/01	11:57	1/31/01
164121	0143-HMW40-0101	Water	1/31/01	13:12	1/31/01
164123	0143-HMW41-0101	Water	1/31/01	12:20	1/31/01

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 32 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 163945 - 0143-HMW13-0101-QC

Analysis:	8270	Analytical Method:	S 8270C	QC Batch:	QC08927	Date Analyzed:	2/8/01
Analyst:	SSC	Preparation Method:	E 3510C	Prep Batch:	PB07693	Date Prepared:	2/1/01

Param	Flag	Result	Units	Dilution	RDL
Pyridine		<0.005	mg/L	1	0.005
n-Nitrosodimethylamine		<0.005	mg/L	1	0.005
2-Picoline		<0.005	mg/L	1	0.005
Methyl methanesulfonate		<0.005	mg/L	1	0.005
Ethyl methanesulfonate		<0.005	mg/L	1	0.005
Phenol		<0.005	mg/L	1	0.005
Aniline		<0.005	mg/L	1	0.005
bis (2-chloroethyl) ether		<0.005	mg/L	1	0.005
2-Chlorophenol		<0.005	mg/L	1	0.005
1,3-Dichlorobenzene		<0.005	mg/L	1	0.005
1,4-Dichlorobenzene		<0.005	mg/L	1	0.005
Benzyl alcohol		<0.005	mg/L	1	0.005
1,2-Dichlorobenzene		<0.005	mg/L	1	0.005
2-Methylphenol		<0.005	mg/L	1	0.005
bis (2-chloroisopropyl) ether		<0.005	mg/L	1	0.005
4-Methylphenol/3-Methylphenol		<0.005	mg/L	1	0.005
Acetophenone		<0.005	mg/L	1	0.005
n-Nitrosodi-n-propylamine		<0.005	mg/L	1	0.005
Hexachloroethane		<0.005	mg/L	1	0.005
Nitrobenzene		<0.005	mg/L	1	0.005
n-Nitrosopiperidine		<0.005	mg/L	1	0.005
Isophorone		<0.005	mg/L	1	0.005
2-Nitrophenol		<0.005	mg/L	1	0.005
2,4-Dimethylphenol		<0.005	mg/L	1	0.005
bis (2-chloroethoxy) methane		<0.005	mg/L	1	0.005
Benzoic acid		<0.005	mg/L	1	0.005
2,4-Dichlorophenol		<0.005	mg/L	1	0.005
1,2,4-Trichlorobenzene		<0.005	mg/L	1	0.005
a,a-Dimethylphenethylamine		<0.005	mg/L	1	0.005
Naphthalene		<0.005	mg/L	1	0.005
4-Chloroaniline		<0.005	mg/L	1	0.005
2,6-Dichlorophenol		<0.005	mg/L	1	0.005
Hexachlorobutadiene		<0.005	mg/L	1	0.005
n-Nitroso-di-n-butylamine		<0.005	mg/L	1	0.005
4-Chloro-3-methylphenol		<0.005	mg/L	1	0.005
1-Methylnaphthalene		<0.005	mg/L	1	0.005
2-Methylnaphthalene		<0.005	mg/L	1	0.005
1,2,4,5-Tetrachlorobenzene		<0.005	mg/L	1	0.005
Hexachlorocyclopentadiene		<0.005	mg/L	1	0.005
2,4,6-Trichlorophenol		<0.005	mg/L	1	0.005
2,4,5-Trichlorophenol		<0.005	mg/L	1	0.005
2-Chloronaphthalene		<0.005	mg/L	1	0.005
1-Chloronaphthalene		<0.005	mg/L	1	0.005
2-Nitroaniline		<0.005	mg/L	1	0.005
Dimethylphthalate		<0.005	mg/L	1	0.005
Acenaphthylene		<0.005	mg/L	1	0.005
2,6-Dinitrotoluene		<0.005	mg/L	1	0.005
3-Nitroaniline		<0.005	mg/L	1	0.005

Continued ...

... *Continued* Sample: 163945 Analysis: 8270

Param	Flag	Result	Units	Dilution	RDL
Acenaphthene		<0.005	mg/L	1	0.005
2,4-Dinitrophenol		<0.005	mg/L	1	0.005
Dibenzofuran		<0.005	mg/L	1	0.005
Pentachlorobenzene		<0.005	mg/L	1	0.005
4-Nitrophenol		<0.005	mg/L	1	0.005
1-Naphthylamine		<0.005	mg/L	1	0.005
2,4-Dinitrotoluene		<0.005	mg/L	1	0.005
2-Naphthylamine		<0.005	mg/L	1	0.005
2,3,4,6-Tetrachlorophenol		<0.005	mg/L	1	0.005
Fluorene		<0.005	mg/L	1	0.005
Diethylphthalate		<0.005	mg/L	1	0.005
4-Chlorophenyl-phenylether		<0.005	mg/L	1	0.005
4-Nitroaniline		<0.005	mg/L	1	0.005
4,6-Dinitro-2-methylphenol		<0.005	mg/L	1	0.005
Diphenylamine		<0.005	mg/L	1	0.005
Diphenylhydrazine		<0.005	mg/L	1	0.005
4-Bromophenyl-phenylether		<0.005	mg/L	1	0.005
Phenacetin		<0.005	mg/L	1	0.005
Hexachlorobenzene		<0.005	mg/L	1	0.005
4-Aminobiphenyl		<0.005	mg/L	1	0.005
Pentachlorophenol		<0.005	mg/L	1	0.005
Pentachloronitrobenzene		<0.005	mg/L	1	0.005
Pronamide		<0.005	mg/L	1	0.005
Phenanthrene		<0.005	mg/L	1	0.005
Anthracene		<0.005	mg/L	1	0.005
Di-n-butylphthalate		<0.005	mg/L	1	0.005
Fluoranthene		<0.005	mg/L	1	0.005
Benzidine		<0.005	mg/L	1	0.005
Pyrene		<0.005	mg/L	1	0.005
p-Dimethylaminoazobenzene		<0.005	mg/L	1	0.005
Butylbenzylphthalate		<0.005	mg/L	1	0.005
Benzo(a)anthracene		<0.005	mg/L	1	0.005
3,3-Dichlorobenzidine		<0.005	mg/L	1	0.005
Chrysene		<0.005	mg/L	1	0.005
Bis (2-ethylhexyl) phthalate		<0.005	mg/L	1	0.005
Di-n-octylphthalate		<0.005	mg/L	1	0.005
Benzo(b)fluoranthene		<0.005	mg/L	1	0.005
7,12-Dimethylbenz(a)anthracene		<0.005	mg/L	1	0.005
Benzo(k)fluoranthene		<0.005	mg/L	1	0.005
Benzo(a)pyrene		<0.005	mg/L	1	0.005
3-Methylcholanthrene		<0.005	mg/L	1	0.005
Dibenzo(a,j)acridine		<0.005	mg/L	1	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	1	0.005
Dibenzo(a,h)anthracene		<0.005	mg/L	1	0.005
Benzo(g,h,i)perylene		<0.005	mg/L	1	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		23.45	mg/L	1	80	29	8 - 73
Phenol-d5		15.93	mg/L	1	80	19	8 - 62
Nitrobenzene-d5		47.56	mg/L	1	80	59	44 - 109
2-Fluorobiphenyl		50.79	mg/L	1	80	63	45 - 109
2,4,6-Tribromophenol		65.26	mg/L	1	80	81	39 - 132
Terphenyl-d14		46.55	mg/L	1	80	58	46 - 121

Sample: 163947 - 0143-HMW11-0101

Analysis:	8270	Analytical Method:	S 8270C	QC Batch:	QC08927	Date Analyzed:	2/8/01
Analyst:	SSC	Preparation Method:	E 3510C	Prep Batch:	PB07693	Date Prepared:	2/1/01

Param	Flag	Result	Units	Dilution	RDL
Pyridine		<0.005	mg/L	1	0.005
n-Nitrosodimethylamine		<0.005	mg/L	1	0.005
2-Picoline		<0.005	mg/L	1	0.005
Methyl methanesulfonate		<0.005	mg/L	1	0.005
Ethyl methanesulfonate		<0.005	mg/L	1	0.005
Phenol		<0.005	mg/L	1	0.005
Aniline		<0.005	mg/L	1	0.005
bis (2-chloroethyl) ether		<0.005	mg/L	1	0.005
2-Chlorophenol		<0.005	mg/L	1	0.005
1,3-Dichlorobenzene		<0.005	mg/L	1	0.005
1,4-Dichlorobenzene		<0.005	mg/L	1	0.005
Benzyl alcohol		<0.005	mg/L	1	0.005
1,2-Dichlorobenzene		<0.005	mg/L	1	0.005
2-Methylphenol		<0.005	mg/L	1	0.005
bis (2-chloroisopropyl) ether		<0.005	mg/L	1	0.005
4-Methylphenol/3-Methylphenol		<0.005	mg/L	1	0.005
Acetophenone		<0.005	mg/L	1	0.005
n-Nitrosodi-n-propylamine		<0.005	mg/L	1	0.005
Hexachloroethane		<0.005	mg/L	1	0.005
Nitrobenzene		<0.005	mg/L	1	0.005
n-Nitrosopiperidine		<0.005	mg/L	1	0.005
Isophorone		<0.005	mg/L	1	0.005
2-Nitrophenol		<0.005	mg/L	1	0.005
2,4-Dimethylphenol		<0.005	mg/L	1	0.005
bis (2-chloroethoxy) methane		<0.005	mg/L	1	0.005
Benzoic acid		<0.005	mg/L	1	0.005
2,4-Dichlorophenol		<0.005	mg/L	1	0.005
1,2,4-Trichlorobenzene		<0.005	mg/L	1	0.005
a,a-Dimethylphenethylamine		<0.005	mg/L	1	0.005
Naphthalene		<0.005	mg/L	1	0.005
4-Chloroaniline		<0.005	mg/L	1	0.005
2,6-Dichlorophenol		<0.005	mg/L	1	0.005
Hexachlorobutadiene		<0.005	mg/L	1	0.005
n-Nitroso-di-n-butylamine		<0.005	mg/L	1	0.005
4-Chloro-3-methylphenol		<0.005	mg/L	1	0.005
1-Methylnaphthalene		<0.005	mg/L	1	0.005
2-Methylnaphthalene		<0.005	mg/L	1	0.005
1,2,4,5-Tetrachlorobenzene		<0.005	mg/L	1	0.005
Hexachlorocyclopentadiene		<0.005	mg/L	1	0.005
2,4,6-Trichlorophenol		<0.005	mg/L	1	0.005
2,4,5-Trichlorophenol		<0.005	mg/L	1	0.005
2-Chloronaphthalene		<0.005	mg/L	1	0.005
1-Chloronaphthalene		<0.005	mg/L	1	0.005
2-Nitroaniline		<0.005	mg/L	1	0.005
Dimethylphthalate		<0.005	mg/L	1	0.005
Acenaphthylene		<0.005	mg/L	1	0.005
2,6-Dinitrotoluene		<0.005	mg/L	1	0.005
3-Nitroaniline		<0.005	mg/L	1	0.005
Acenaphthene		<0.005	mg/L	1	0.005
2,4-Dinitrophenol		<0.005	mg/L	1	0.005
Dibenzofuran		<0.005	mg/L	1	0.005

Continued ...

... Continued Sample: 163947 Analysis: 8270

Param	Flag	Result	Units	Dilution	RDL
Pentachlorobenzene		<0.005	mg/L	1	0.005
4-Nitrophenol		<0.005	mg/L	1	0.005
1-Naphthylamine		<0.005	mg/L	1	0.005
2,4-Dinitrotoluene		<0.005	mg/L	1	0.005
2-Naphthylamine		<0.005	mg/L	1	0.005
2,3,4,6-Tetrachlorophenol		<0.005	mg/L	1	0.005
Fluorene		<0.005	mg/L	1	0.005
Diethylphthalate		<0.005	mg/L	1	0.005
4-Chlorophenyl-phenylether		<0.005	mg/L	1	0.005
4-Nitroaniline		<0.005	mg/L	1	0.005
4,6-Dinitro-2-methylphenol		<0.005	mg/L	1	0.005
Diphenylamine		<0.005	mg/L	1	0.005
Diphenylhydrazine		<0.005	mg/L	1	0.005
4-Bromophenyl-phenylether		<0.005	mg/L	1	0.005
Phenacetin		<0.005	mg/L	1	0.005
Hexachlorobenzene		<0.005	mg/L	1	0.005
4-Aminobiphenyl		<0.005	mg/L	1	0.005
Pentachlorophenol		<0.005	mg/L	1	0.005
Pentachloronitrobenzene		<0.005	mg/L	1	0.005
Pronamide		<0.005	mg/L	1	0.005
Phenanthrene		<0.005	mg/L	1	0.005
Anthracene		<0.005	mg/L	1	0.005
Di-n-butylphthalate		<0.005	mg/L	1	0.005
Fluoranthene		<0.005	mg/L	1	0.005
Benzidine		<0.005	mg/L	1	0.005
Pyrene		<0.005	mg/L	1	0.005
p-Dimethylaminoazobenzene		<0.005	mg/L	1	0.005
Butylbenzylphthalate		<0.005	mg/L	1	0.005
Benzo(a)anthracene		<0.005	mg/L	1	0.005
3,3-Dichlorobenzidine		<0.005	mg/L	1	0.005
Chrysene		<0.005	mg/L	1	0.005
Bis (2-ethylhexyl) phthalate		<0.005	mg/L	1	0.005
Di-n-octylphthalate		<0.005	mg/L	1	0.005
Benzo(b)fluoranthene		<0.005	mg/L	1	0.005
7,12-Dimethylbenz(a)anthracene		<0.005	mg/L	1	0.005
Benzo(k)fluoranthene		<0.005	mg/L	1	0.005
Benzo(a)pyrene		<0.005	mg/L	1	0.005
3-Methylcholanthrene		<0.005	mg/L	1	0.005
Dibenzo(a,j)acridine		<0.005	mg/L	1	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	1	0.005
Dibenzo(a,h)anthracene		<0.005	mg/L	1	0.005
Benzo(g,h,i)perylene		<0.005	mg/L	1	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		24.84	mg/L	1	80	31	8 - 73
Phenol-d5		16.75	mg/L	1	80	20	8 - 62
Nitrobenzene-d5		51.00	mg/L	1	80	63	44 - 109
2-Fluorobiphenyl		53.02	mg/L	1	80	66	45 - 109
2,4,6-Tribromophenol		65.56	mg/L	1	80	81	39 - 132
Terphenyl-d14		50.70	mg/L	1	80	63	46 - 121

Sample: 163949 - 0143-HMW43-0101

Analysis:	8270	Analytical Method:	S 8270C	QC Batch:	QC08927	Date Analyzed:	2/8/01
Analyst:	SSC	Preparation Method:	E 3510C	Prep Batch:	PB07693	Date Prepared:	2/1/01

Param	Flag	Result	Units	Dilution	RDL
Pyridine		<0.005	mg/L	1	0.005
n-Nitrosodimethylamine		<0.005	mg/L	1	0.005
2-Picoline		<0.005	mg/L	1	0.005
Methyl methanesulfonate		<0.005	mg/L	1	0.005
Ethyl methanesulfonate		<0.005	mg/L	1	0.005
Phenol		<0.005	mg/L	1	0.005
Aniline		<0.005	mg/L	1	0.005
bis (2-chloroethyl) ether		<0.005	mg/L	1	0.005
2-Chlorophenol		<0.005	mg/L	1	0.005
1,3-Dichlorobenzene		<0.005	mg/L	1	0.005
1,4-Dichlorobenzene		<0.005	mg/L	1	0.005
Benzyl alcohol		<0.005	mg/L	1	0.005
1,2-Dichlorobenzene		<0.005	mg/L	1	0.005
2-Methylphenol		<0.005	mg/L	1	0.005
bis (2-chloroisopropyl) ether		<0.005	mg/L	1	0.005
4-Methylphenol/3-Methylphenol		<0.005	mg/L	1	0.005
Acetophenone		<0.005	mg/L	1	0.005
n-Nitrosodi-n-propylamine		<0.005	mg/L	1	0.005
Hexachloroethane		<0.005	mg/L	1	0.005
Nitrobenzene		<0.005	mg/L	1	0.005
n-Nitrosopiperidine		<0.005	mg/L	1	0.005
Isophorone		<0.005	mg/L	1	0.005
2-Nitrophenol		<0.005	mg/L	1	0.005
2,4-Dimethylphenol		<0.005	mg/L	1	0.005
bis (2-chloroethoxy) methane		<0.005	mg/L	1	0.005
Benzoic acid		<0.005	mg/L	1	0.005
2,4-Dichlorophenol		<0.005	mg/L	1	0.005
1,2,4-Trichlorobenzene		<0.005	mg/L	1	0.005
a,a-Dimethylphenethylamine		<0.005	mg/L	1	0.005
Naphthalene		<0.005	mg/L	1	0.005
4-Chloroaniline		<0.005	mg/L	1	0.005
2,6-Dichlorophenol		<0.005	mg/L	1	0.005
Hexachlorobutadiene		<0.005	mg/L	1	0.005
n-Nitroso-di-n-butylamine		<0.005	mg/L	1	0.005
4-Chloro-3-methylphenol		<0.005	mg/L	1	0.005
1-Methylnaphthalene		<0.005	mg/L	1	0.005
2-Methylnaphthalene		<0.005	mg/L	1	0.005
1,2,4,5-Tetrachlorobenzene		<0.005	mg/L	1	0.005
Hexachlorocyclopentadiene		<0.005	mg/L	1	0.005
2,4,6-Trichlorophenol		<0.005	mg/L	1	0.005
2,4,5-Trichlorophenol		<0.005	mg/L	1	0.005
2-Chloronaphthalene		<0.005	mg/L	1	0.005
1-Chloronaphthalene		<0.005	mg/L	1	0.005
2-Nitroaniline		<0.005	mg/L	1	0.005
Dimethylphthalate		<0.005	mg/L	1	0.005
Acenaphthylene		<0.005	mg/L	1	0.005
2,6-Dinitrotoluene		<0.005	mg/L	1	0.005
3-Nitroaniline		<0.005	mg/L	1	0.005
Acenaphthene		<0.005	mg/L	1	0.005
2,4-Dinitrophenol		<0.005	mg/L	1	0.005
Dibenzofuran		<0.005	mg/L	1	0.005

Continued ...

... *Continued* Sample: 163949 Analysis: 8270

Param	Flag	Result	Units	Dilution	RDL
Pentachlorobenzene		<0.005	mg/L	1	0.005
4-Nitrophenol		<0.005	mg/L	1	0.005
1-Naphthylamine		<0.005	mg/L	1	0.005
2,4-Dinitrotoluene		<0.005	mg/L	1	0.005
2-Naphthylamine		<0.005	mg/L	1	0.005
2,3,4,6-Tetrachlorophenol		<0.005	mg/L	1	0.005
Fluorene		<0.005	mg/L	1	0.005
Diethylphthalate		<0.005	mg/L	1	0.005
4-Chlorophenyl-phenylether		<0.005	mg/L	1	0.005
4-Nitroaniline		<0.005	mg/L	1	0.005
4,6-Dinitro-2-methylphenol		<0.005	mg/L	1	0.005
Diphenylamine		<0.005	mg/L	1	0.005
Diphenylhydrazine		<0.005	mg/L	1	0.005
4-Bromophenyl-phenylether		<0.005	mg/L	1	0.005
Phenacetin		<0.005	mg/L	1	0.005
Hexachlorobenzene		<0.005	mg/L	1	0.005
4-Aminobiphenyl		<0.005	mg/L	1	0.005
Pentachlorophenol		<0.005	mg/L	1	0.005
Pentachloronitrobenzene		<0.005	mg/L	1	0.005
Pronamide		<0.005	mg/L	1	0.005
Phenanthrene		<0.005	mg/L	1	0.005
Anthracene		<0.005	mg/L	1	0.005
Di-n-butylphthalate		<0.005	mg/L	1	0.005
Fluoranthene		<0.005	mg/L	1	0.005
Benzidine		<0.005	mg/L	1	0.005
Pyrene		<0.005	mg/L	1	0.005
p-Dimethylaminoazobenzene		<0.005	mg/L	1	0.005
Butylbenzylphthalate		<0.005	mg/L	1	0.005
Benzo(a)anthracene		<0.005	mg/L	1	0.005
3,3-Dichlorobenzidine		<0.005	mg/L	1	0.005
Chrysene		<0.005	mg/L	1	0.005
Bis (2-ethylhexyl) phthalate		<0.005	mg/L	1	0.005
Di-n-octylphthalate		<0.005	mg/L	1	0.005
Benzo(b)fluoranthene		<0.005	mg/L	1	0.005
7,12-Dimethylbenz(a)anthracene		<0.005	mg/L	1	0.005
Benzo(k)fluoranthene		<0.005	mg/L	1	0.005
Benzo(a)pyrene		<0.005	mg/L	1	0.005
3-Methylcholanthrene		<0.005	mg/L	1	0.005
Dibenzo(a,j)acridine		<0.005	mg/L	1	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	1	0.005
Dibenzo(a,h)anthracene		<0.005	mg/L	1	0.005
Benzo(g,h,i)perylene		<0.005	mg/L	1	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		22.56	mg/L	1	80	28	8 - 73
Phenol-d5		15.02	mg/L	1	80	18	8 - 62
Nitrobenzene-d5		46.73	mg/L	1	80	58	44 - 109
2-Fluorobiphenyl		50.49	mg/L	1	80	63	45 - 109
2,4,6-Tribromophenol		63.59	mg/L	1	80	79	39 - 132
Terphenyl-d14		51.06	mg/L	1	80	63	46 - 121

Sample: 163951 - 0143-HMW13-0101

Analysis:	8270	Analytical Method:	S 8270C	QC Batch:	QC08927	Date Analyzed:	2/8/01
Analyst:	SSC	Preparation Method:	E 3510C	Prep Batch:	PB07693	Date Prepared:	2/1/01

Param	Flag	Result	Units	Dilution	RDL
Pyridine		<0.005	mg/L	1	0.005
n-Nitrosodimethylamine		<0.005	mg/L	1	0.005
2-Picoline		<0.005	mg/L	1	0.005
Methyl methanesulfonate		<0.005	mg/L	1	0.005
Ethyl methanesulfonate		<0.005	mg/L	1	0.005
Phenol		<0.005	mg/L	1	0.005
Aniline		<0.005	mg/L	1	0.005
bis (2-chloroethyl) ether		<0.005	mg/L	1	0.005
2-Chlorophenol		<0.005	mg/L	1	0.005
1,3-Dichlorobenzene		<0.005	mg/L	1	0.005
1,4-Dichlorobenzene		<0.005	mg/L	1	0.005
Benzyl alcohol		<0.005	mg/L	1	0.005
1,2-Dichlorobenzene		<0.005	mg/L	1	0.005
2-Methylphenol		<0.005	mg/L	1	0.005
bis (2-chloroisopropyl) ether		<0.005	mg/L	1	0.005
4-Methylphenol/3-Methylphenol		<0.005	mg/L	1	0.005
Acetophenone		<0.005	mg/L	1	0.005
n-Nitrosodi-n-propylamine		<0.005	mg/L	1	0.005
Hexachloroethane		<0.005	mg/L	1	0.005
Nitrobenzene		<0.005	mg/L	1	0.005
n-Nitrosopiperidine		<0.005	mg/L	1	0.005
Isophorone		<0.005	mg/L	1	0.005
2-Nitrophenol		<0.005	mg/L	1	0.005
2,4-Dimethylphenol		<0.005	mg/L	1	0.005
bis (2-chloroethoxy) methane		<0.005	mg/L	1	0.005
Benzoic acid		<0.005	mg/L	1	0.005
2,4-Dichlorophenol		<0.005	mg/L	1	0.005
1,2,4-Trichlorobenzene		<0.005	mg/L	1	0.005
a,a-Dimethylphenethylamine		<0.005	mg/L	1	0.005
Naphthalene		<0.005	mg/L	1	0.005
4-Chloroaniline		<0.005	mg/L	1	0.005
2,6-Dichlorophenol		<0.005	mg/L	1	0.005
Hexachlorobutadiene		<0.005	mg/L	1	0.005
n-Nitroso-di-n-butylamine		<0.005	mg/L	1	0.005
4-Chloro-3-methylphenol		<0.005	mg/L	1	0.005
1-Methylnaphthalene		<0.005	mg/L	1	0.005
2-Methylnaphthalene		<0.005	mg/L	1	0.005
1,2,4,5-Tetrachlorobenzene		<0.005	mg/L	1	0.005
Hexachlorocyclopentadiene		<0.005	mg/L	1	0.005
2,4,6-Trichlorophenol		<0.005	mg/L	1	0.005
2,4,5-Trichlorophenol		<0.005	mg/L	1	0.005
2-Chloronaphthalene		<0.005	mg/L	1	0.005
1-Chloronaphthalene		<0.005	mg/L	1	0.005
2-Nitroaniline		<0.005	mg/L	1	0.005
Dimethylphthalate		<0.005	mg/L	1	0.005
Acenaphthylene		<0.005	mg/L	1	0.005
2,6-Dinitrotoluene		<0.005	mg/L	1	0.005
3-Nitroaniline		<0.005	mg/L	1	0.005
Acenaphthene		<0.005	mg/L	1	0.005
2,4-Dinitrophenol		<0.005	mg/L	1	0.005
Dibenzofuran		<0.005	mg/L	1	0.005

Continued ...

... *Continued* Sample: 163951 Analysis: 8270

Param	Flag	Result	Units	Dilution	RDL
Pentachlorobenzene		<0.005	mg/L	1	0.005
4-Nitrophenol		<0.005	mg/L	1	0.005
1-Naphthylamine		<0.005	mg/L	1	0.005
2,4-Dinitrotoluene		<0.005	mg/L	1	0.005
2-Naphthylamine		<0.005	mg/L	1	0.005
2,3,4,6-Tetrachlorophenol		<0.005	mg/L	1	0.005
Fluorene		<0.005	mg/L	1	0.005
Diethylphthalate		<0.005	mg/L	1	0.005
4-Chlorophenyl-phenylether		<0.005	mg/L	1	0.005
4-Nitroaniline		<0.005	mg/L	1	0.005
4,6-Dinitro-2-methylphenol		<0.005	mg/L	1	0.005
Diphenylamine		<0.005	mg/L	1	0.005
Diphenylhydrazine		<0.005	mg/L	1	0.005
4-Bromophenyl-phenylether		<0.005	mg/L	1	0.005
Phenacetin		<0.005	mg/L	1	0.005
Hexachlorobenzene		<0.005	mg/L	1	0.005
4-Aminobiphenyl		<0.005	mg/L	1	0.005
Pentachlorophenol		<0.005	mg/L	1	0.005
Pentachloronitrobenzene		<0.005	mg/L	1	0.005
Pronamide		<0.005	mg/L	1	0.005
Phenanthrene		<0.005	mg/L	1	0.005
Anthracene		<0.005	mg/L	1	0.005
Di-n-butylphthalate		<0.005	mg/L	1	0.005
Fluoranthene		<0.005	mg/L	1	0.005
Benzidine		<0.005	mg/L	1	0.005
Pyrene		<0.005	mg/L	1	0.005
p-Dimethylaminoazobenzene		<0.005	mg/L	1	0.005
Butylbenzylphthalate		<0.005	mg/L	1	0.005
Benzo(a)anthracene		<0.005	mg/L	1	0.005
3,3-Dichlorobenzidine		<0.005	mg/L	1	0.005
Chrysene		<0.005	mg/L	1	0.005
Bis (2-ethylhexyl) phthalate		<0.005	mg/L	1	0.005
Di-n-octylphthalate		<0.005	mg/L	1	0.005
Benzo(b)fluoranthene		<0.005	mg/L	1	0.005
7,12-Dimethylbenz(a)anthracene		<0.005	mg/L	1	0.005
Benzo(k)fluoranthene		<0.005	mg/L	1	0.005
Benzo(a)pyrene		<0.005	mg/L	1	0.005
3-Methylcholanthrene		<0.005	mg/L	1	0.005
Dibenzo(a,j)acridine		<0.005	mg/L	1	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	1	0.005
Dibenzo(a,h)anthracene		<0.005	mg/L	1	0.005
Benzo(g,h,i)perylene		<0.005	mg/L	1	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		21.16	mg/L	1	80	26	8 - 73
Phenol-d5		14.48	mg/L	1	80	18	8 - 62
Nitrobenzene-d5		40.68	mg/L	1	80	50	44 - 109
2-Fluorobiphenyl		44.48	mg/L	1	80	55	45 - 109
2,4,6-Tribromophenol		62.86	mg/L	1	80	78	39 - 132
Terphenyl-d14		46.22	mg/L	1	80	57	46 - 121

Sample: 164014 - 0143-HMW38-0101

Analysis:	8270	Analytical Method:	S 8270C	QC Batch:	QC09144	Date Analyzed:	2/12/01
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB07873	Date Prepared:	2/6/01

Param	Flag	Result	Units	Dilution	RDL
Pyridine		<0.005	mg/L	1	0.005
n-Nitrosodimethylamine		<0.005	mg/L	1	0.005
2-Picoline		<0.005	mg/L	1	0.005
Methyl methanesulfonate		<0.005	mg/L	1	0.005
Ethyl methanesulfonate		<0.005	mg/L	1	0.005
Phenol		<0.005	mg/L	1	0.005
Aniline		<0.005	mg/L	1	0.005
bis (2-chloroethyl) ether		<0.005	mg/L	1	0.005
2-Chlorophenol		<0.005	mg/L	1	0.005
1,3-Dichlorobenzene		<0.005	mg/L	1	0.005
1,4-Dichlorobenzene		<0.005	mg/L	1	0.005
Benzyl alcohol		<0.005	mg/L	1	0.005
1,2-Dichlorobenzene		<0.005	mg/L	1	0.005
2-Methylphenol		<0.005	mg/L	1	0.005
bis (2-chloroisopropyl) ether		<0.005	mg/L	1	0.005
4-Methylphenol/3-Methylphenol		<0.005	mg/L	1	0.005
Acetophenone		<0.005	mg/L	1	0.005
n-Nitrosodi-n-propylamine		<0.005	mg/L	1	0.005
Hexachloroethane		<0.005	mg/L	1	0.005
Nitrobenzene		<0.005	mg/L	1	0.005
n-Nitrosopiperidine		<0.005	mg/L	1	0.005
Isophorone		<0.005	mg/L	1	0.005
2-Nitrophenol		<0.005	mg/L	1	0.005
2,4-Dimethylphenol		<0.005	mg/L	1	0.005
bis (2-chloroethoxy) methane		<0.005	mg/L	1	0.005
Benzoic acid		<0.005	mg/L	1	0.005
2,4-Dichlorophenol		<0.005	mg/L	1	0.005
1,2,4-Trichlorobenzene		<0.005	mg/L	1	0.005
a,a-Dimethylphenethylamine		<0.005	mg/L	1	0.005
Naphthalene		<0.005	mg/L	1	0.005
4-Chloroaniline		<0.005	mg/L	1	0.005
2,6-Dichlorophenol		<0.005	mg/L	1	0.005
Hexachlorobutadiene		<0.005	mg/L	1	0.005
n-Nitroso-di-n-butylamine		<0.005	mg/L	1	0.005
4-Chloro-3-methylphenol		<0.005	mg/L	1	0.005
1-Methylnaphthalene		<0.005	mg/L	1	0.005
2-Methylnaphthalene		<0.005	mg/L	1	0.005
1,2,4,5-Tetrachlorobenzene		<0.005	mg/L	1	0.005
Hexachlorocyclopentadiene		<0.005	mg/L	1	0.005
2,4,6-Trichlorophenol		<0.005	mg/L	1	0.005
2,4,5-Trichlorophenol		<0.005	mg/L	1	0.005
2-Chloronaphthalene		<0.005	mg/L	1	0.005
1-Chloronaphthalene		<0.005	mg/L	1	0.005
2-Nitroaniline		<0.005	mg/L	1	0.005
Dimethylphthalate		<0.005	mg/L	1	0.005
Acenaphthylene		<0.005	mg/L	1	0.005
2,6-Dinitrotoluene		<0.005	mg/L	1	0.005
3-Nitroaniline		<0.005	mg/L	1	0.005
Acenaphthene		<0.005	mg/L	1	0.005
2,4-Dinitrophenol		<0.005	mg/L	1	0.005
Dibenzofuran		<0.005	mg/L	1	0.005

Continued ...

... *Continued* Sample: 164014 Analysis: 8270

Param	Flag	Result	Units	Dilution	RDL
Pentachlorobenzene		<0.005	mg/L	1	0.005
4-Nitrophenol		<0.005	mg/L	1	0.005
1-Naphthylamine		<0.005	mg/L	1	0.005
2,4-Dinitrotoluene		<0.005	mg/L	1	0.005
2-Naphthylamine		<0.005	mg/L	1	0.005
2,3,4,6-Tetrachlorophenol		<0.005	mg/L	1	0.005
Fluorene		<0.005	mg/L	1	0.005
Diethylphthalate		<0.005	mg/L	1	0.005
4-Chlorophenyl-phenylether		<0.005	mg/L	1	0.005
4-Nitroaniline		<0.005	mg/L	1	0.005
4,6-Dinitro-2-methylphenol		<0.005	mg/L	1	0.005
Diphenylamine		<0.005	mg/L	1	0.005
Diphenylhydrazine		<0.005	mg/L	1	0.005
4-Bromophenyl-phenylether		<0.005	mg/L	1	0.005
Phenacetin		<0.005	mg/L	1	0.005
Hexachlorobenzene		<0.005	mg/L	1	0.005
4-Aminobiphenyl		<0.005	mg/L	1	0.005
Pentachlorophenol		<0.005	mg/L	1	0.005
Pentachloronitrobenzene		<0.005	mg/L	1	0.005
Pronamide		<0.005	mg/L	1	0.005
Phenanthrene		<0.005	mg/L	1	0.005
Anthracene		<0.005	mg/L	1	0.005
Di-n-butylphthalate		<0.005	mg/L	1	0.005
Fluoranthene		<0.005	mg/L	1	0.005
Benzidine		<0.005	mg/L	1	0.005
Pyrene		<0.005	mg/L	1	0.005
p-Dimethylaminoazobenzene		<0.005	mg/L	1	0.005
Butylbenzylphthalate		<0.005	mg/L	1	0.005
Benzo(a)anthracene		<0.005	mg/L	1	0.005
3,3-Dichlorobenzidine		<0.005	mg/L	1	0.005
Chrysene		<0.005	mg/L	1	0.005
Bis (2-ethylhexyl) phthalate		<0.005	mg/L	1	0.005
Di-n-octylphthalate		<0.005	mg/L	1	0.005
Benzo(b)fluoranthene		<0.005	mg/L	1	0.005
7,12-Dimethylbenz(a)anthracene		<0.005	mg/L	1	0.005
Benzo(k)fluoranthene		<0.005	mg/L	1	0.005
Benzo(a)pyrene		<0.005	mg/L	1	0.005
3-Methylcholanthrene		<0.005	mg/L	1	0.005
Dibenzo(a,j)acridine		<0.005	mg/L	1	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	1	0.005
Dibenzo(a,h)anthracene		<0.005	mg/L	1	0.005
Benzo(g,h,i)perylene		<0.005	mg/L	1	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		34.00	mg/L	1	80	42	8 - 73
Phenol-d5		22.73	mg/L	1	80	28	8 - 62
Nitrobenzene-d5		67.02	mg/L	1	80	83	44 - 109
2-Fluorobiphenyl		71.51	mg/L	1	80	89	45 - 109
2,4,6-Tribromophenol		84.30	mg/L	1	80	105	39 - 132
Terphenyl-d14		75.09	mg/L	1	80	93	46 - 121

Sample: 164016 - 0143-HMW37-0101

Analysis:	8270	Analytical Method:	S 8270C	QC Batch:	QC09144	Date Analyzed:	2/12/01
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB07873	Date Prepared:	2/6/01

Param	Flag	Result	Units	Dilution	RDL
Pyridine		<0.005	mg/L	1	0.005
n-Nitrosodimethylamine		<0.005	mg/L	1	0.005
2-Picoline		<0.005	mg/L	1	0.005
Methyl methanesulfonate		<0.005	mg/L	1	0.005
Ethyl methanesulfonate		<0.005	mg/L	1	0.005
Phenol		<0.005	mg/L	1	0.005
Aniline		<0.005	mg/L	1	0.005
bis (2-chloroethyl) ether		<0.005	mg/L	1	0.005
2-Chlorophenol		<0.005	mg/L	1	0.005
1,3-Dichlorobenzene		<0.005	mg/L	1	0.005
1,4-Dichlorobenzene		<0.005	mg/L	1	0.005
Benzyl alcohol		<0.005	mg/L	1	0.005
1,2-Dichlorobenzene		<0.005	mg/L	1	0.005
2-Methylphenol		<0.005	mg/L	1	0.005
bis (2-chloroisopropyl) ether		<0.005	mg/L	1	0.005
4-Methylphenol/3-Methylphenol		<0.005	mg/L	1	0.005
Acetophenone		<0.005	mg/L	1	0.005
n-Nitrosodi-n-propylamine		<0.005	mg/L	1	0.005
Hexachloroethane		<0.005	mg/L	1	0.005
Nitrobenzene		<0.005	mg/L	1	0.005
n-Nitrosopiperidine		<0.005	mg/L	1	0.005
Isophorone		<0.005	mg/L	1	0.005
2-Nitrophenol		<0.005	mg/L	1	0.005
2,4-Dimethylphenol		<0.005	mg/L	1	0.005
bis (2-chloroethoxy) methane		<0.005	mg/L	1	0.005
Benzoic acid		<0.005	mg/L	1	0.005
2,4-Dichlorophenol		<0.005	mg/L	1	0.005
1,2,4-Trichlorobenzene		<0.005	mg/L	1	0.005
a,a-Dimethylphenethylamine		<0.005	mg/L	1	0.005
Naphthalene		<0.005	mg/L	1	0.005
4-Chloroaniline		<0.005	mg/L	1	0.005
2,6-Dichlorophenol		<0.005	mg/L	1	0.005
Hexachlorobutadiene		<0.005	mg/L	1	0.005
n-Nitroso-di-n-butylamine		<0.005	mg/L	1	0.005
4-Chloro-3-methylphenol		<0.005	mg/L	1	0.005
1-Methylnaphthalene		<0.005	mg/L	1	0.005
2-Methylnaphthalene		<0.005	mg/L	1	0.005
1,2,4,5-Tetrachlorobenzene		<0.005	mg/L	1	0.005
Hexachlorocyclopentadiene		<0.005	mg/L	1	0.005
2,4,6-Trichlorophenol		<0.005	mg/L	1	0.005
2,4,5-Trichlorophenol		<0.005	mg/L	1	0.005
2-Chloronaphthalene		<0.005	mg/L	1	0.005
1-Chloronaphthalene		<0.005	mg/L	1	0.005
2-Nitroaniline		<0.005	mg/L	1	0.005
Dimethylphthalate		<0.005	mg/L	1	0.005
Acenaphthylene		<0.005	mg/L	1	0.005
2,6-Dinitrotoluene		<0.005	mg/L	1	0.005
3-Nitroaniline		<0.005	mg/L	1	0.005
Acenaphthene		<0.005	mg/L	1	0.005
2,4-Dinitrophenol		<0.005	mg/L	1	0.005
Dibenzofuran		<0.005	mg/L	1	0.005

Continued . . .

... *Continued* Sample: 164016 Analysis: 8270

Param	Flag	Result	Units	Dilution	RDL
Pentachlorobenzene		<0.005	mg/L	1	0.005
4-Nitrophenol		<0.005	mg/L	1	0.005
1-Naphthylamine		<0.005	mg/L	1	0.005
2,4-Dinitrotoluene		<0.005	mg/L	1	0.005
2-Naphthylamine		<0.005	mg/L	1	0.005
2,3,4,6-Tetrachlorophenol		<0.005	mg/L	1	0.005
Fluorene		<0.005	mg/L	1	0.005
Diethylphthalate		<0.005	mg/L	1	0.005
4-Chlorophenyl-phenylether		<0.005	mg/L	1	0.005
4-Nitroaniline		<0.005	mg/L	1	0.005
4,6-Dinitro-2-methylphenol		<0.005	mg/L	1	0.005
Diphenylamine		<0.005	mg/L	1	0.005
Diphenylhydrazine		<0.005	mg/L	1	0.005
4-Bromophenyl-phenylether		<0.005	mg/L	1	0.005
Phenacetin		<0.005	mg/L	1	0.005
Hexachlorobenzene		<0.005	mg/L	1	0.005
4-Aminobiphenyl		<0.005	mg/L	1	0.005
Pentachlorophenol		<0.005	mg/L	1	0.005
Pentachloronitrobenzene		<0.005	mg/L	1	0.005
Pronamide		<0.005	mg/L	1	0.005
Phenanthrene		<0.005	mg/L	1	0.005
Anthracene		<0.005	mg/L	1	0.005
Di-n-butylphthalate		<0.005	mg/L	1	0.005
Fluoranthene		<0.005	mg/L	1	0.005
Benzidine		<0.005	mg/L	1	0.005
Pyrene		<0.005	mg/L	1	0.005
p-Dimethylaminoazobenzene		<0.005	mg/L	1	0.005
Butylbenzylphthalate		<0.005	mg/L	1	0.005
Benzo(a)anthracene		<0.005	mg/L	1	0.005
3,3-Dichlorobenzidine		<0.005	mg/L	1	0.005
Chrysene		<0.005	mg/L	1	0.005
Bis (2-ethylhexyl) phthalate		<0.005	mg/L	1	0.005
Di-n-octylphthalate		<0.005	mg/L	1	0.005
Benzo(b)fluoranthene		<0.005	mg/L	1	0.005
7,12-Dimethylbenz(a)anthracene		<0.005	mg/L	1	0.005
Benzo(k)fluoranthene		<0.005	mg/L	1	0.005
Benzo(a)pyrene		<0.005	mg/L	1	0.005
3-Methylcholanthrene		<0.005	mg/L	1	0.005
Dibenzo(a,j)acridine		<0.005	mg/L	1	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	1	0.005
Dibenzo(a,h)anthracene		<0.005	mg/L	1	0.005
Benzo(g,h,i)perylene		<0.005	mg/L	1	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		31.33	mg/L	1	80	39	8 - 73
Phenol-d5		20.44	mg/L	1	80	25	8 - 62
Nitrobenzene-d5		64.27	mg/L	1	80	80	44 - 109
2-Fluorobiphenyl		66.39	mg/L	1	80	82	45 - 109
2,4,6-Tribromophenol		84.39	mg/L	1	80	105	39 - 132
Terphenyl-d14		68.02	mg/L	1	80	85	46 - 121

Sample: 164115 - 0143-HMW39-0101

Analysis:	8270	Analytical Method:	S 8270C	QC Batch:	QC09144	Date Analyzed:	2/12/01
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB07873	Date Prepared:	2/6/01

Param	Flag	Result	Units	Dilution	RDL
Pyridine		<0.005	mg/L	1	0.005
n-Nitrosodimethylamine		<0.005	mg/L	1	0.005
2-Picoline		<0.005	mg/L	1	0.005
Methyl methanesulfonate		<0.005	mg/L	1	0.005
Ethyl methanesulfonate		<0.005	mg/L	1	0.005
Phenol		<0.005	mg/L	1	0.005
Aniline		<0.005	mg/L	1	0.005
bis (2-chloroethyl) ether		<0.005	mg/L	1	0.005
2-Chlorophenol		<0.005	mg/L	1	0.005
1,3-Dichlorobenzene		<0.005	mg/L	1	0.005
1,4-Dichlorobenzene		<0.005	mg/L	1	0.005
Benzyl alcohol		<0.005	mg/L	1	0.005
1,2-Dichlorobenzene		<0.005	mg/L	1	0.005
2-Methylphenol		<0.005	mg/L	1	0.005
bis (2-chloroisopropyl) ether		<0.005	mg/L	1	0.005
4-Methylphenol/3-Methylphenol		<0.005	mg/L	1	0.005
Acetophenone		<0.005	mg/L	1	0.005
n-Nitrosodi-n-propylamine		<0.005	mg/L	1	0.005
Hexachloroethane		<0.005	mg/L	1	0.005
Nitrobenzene		<0.005	mg/L	1	0.005
n-Nitrosopiperidine		<0.005	mg/L	1	0.005
Isophorone		<0.005	mg/L	1	0.005
2-Nitrophenol		<0.005	mg/L	1	0.005
2,4-Dimethylphenol		<0.005	mg/L	1	0.005
bis (2-chloroethoxy) methane		<0.005	mg/L	1	0.005
Benzoic acid		<0.005	mg/L	1	0.005
2,4-Dichlorophenol		<0.005	mg/L	1	0.005
1,2,4-Trichlorobenzene		<0.005	mg/L	1	0.005
a,a-Dimethylphenethylamine		<0.005	mg/L	1	0.005
Naphthalene		<0.005	mg/L	1	0.005
4-Chloroaniline		<0.005	mg/L	1	0.005
2,6-Dichlorophenol		<0.005	mg/L	1	0.005
Hexachlorobutadiene		<0.005	mg/L	1	0.005
n-Nitroso-di-n-butylamine		<0.005	mg/L	1	0.005
4-Chloro-3-methylphenol		<0.005	mg/L	1	0.005
1-Methylnaphthalene		<0.005	mg/L	1	0.005
2-Methylnaphthalene		<0.005	mg/L	1	0.005
1,2,4,5-Tetrachlorobenzene		<0.005	mg/L	1	0.005
Hexachlorocyclopentadiene		<0.005	mg/L	1	0.005
2,4,6-Trichlorophenol		<0.005	mg/L	1	0.005
2,4,5-Trichlorophenol		<0.005	mg/L	1	0.005
2-Chloronaphthalene		<0.005	mg/L	1	0.005
1-Chloronaphthalene		<0.005	mg/L	1	0.005
2-Nitroaniline		<0.005	mg/L	1	0.005
Dimethylphthalate		<0.005	mg/L	1	0.005
Acenaphthylene		<0.005	mg/L	1	0.005
2,6-Dinitrotoluene		<0.005	mg/L	1	0.005
3-Nitroaniline		<0.005	mg/L	1	0.005
Acenaphthene		<0.005	mg/L	1	0.005
2,4-Dinitrophenol		<0.005	mg/L	1	0.005
Dibenzofuran		<0.005	mg/L	1	0.005

Continued . . .

... *Continued* Sample: 164115 Analysis: 8270

Param	Flag	Result	Units	Dilution	RDL
Pentachlorobenzene		<0.005	mg/L	1	0.005
4-Nitrophenol		<0.005	mg/L	1	0.005
1-Naphthylamine		<0.005	mg/L	1	0.005
2,4-Dinitrotoluene		<0.005	mg/L	1	0.005
2-Naphthylamine		<0.005	mg/L	1	0.005
2,3,4,6-Tetrachlorophenol		<0.005	mg/L	1	0.005
Fluorene		<0.005	mg/L	1	0.005
Diethylphthalate		<0.005	mg/L	1	0.005
4-Chlorophenyl-phenylether		<0.005	mg/L	1	0.005
4-Nitroaniline		<0.005	mg/L	1	0.005
4,6-Dinitro-2-methylphenol		<0.005	mg/L	1	0.005
Diphenylamine		<0.005	mg/L	1	0.005
Diphenylhydrazine		<0.005	mg/L	1	0.005
4-Bromophenyl-phenylether		<0.005	mg/L	1	0.005
Phenacetin		<0.005	mg/L	1	0.005
Hexachlorobenzene		<0.005	mg/L	1	0.005
4-Aminobiphenyl		<0.005	mg/L	1	0.005
Pentachlorophenol		<0.005	mg/L	1	0.005
Pentachloronitrobenzene		<0.005	mg/L	1	0.005
Pronamide		<0.005	mg/L	1	0.005
Phenanthrene		<0.005	mg/L	1	0.005
Anthracene		<0.005	mg/L	1	0.005
Di-n-butylphthalate		<0.005	mg/L	1	0.005
Fluoranthene		<0.005	mg/L	1	0.005
Benzidine		<0.005	mg/L	1	0.005
Pyrene		<0.005	mg/L	1	0.005
p-Dimethylaminoazobenzene		<0.005	mg/L	1	0.005
Butylbenzylphthalate		<0.005	mg/L	1	0.005
Benzo(a)anthracene		<0.005	mg/L	1	0.005
3,3-Dichlorobenzidine		<0.005	mg/L	1	0.005
Chrysene		<0.005	mg/L	1	0.005
Bis (2-ethylhexyl) phthalate		<0.005	mg/L	1	0.005
Di-n-octylphthalate		<0.005	mg/L	1	0.005
Benzo(b)fluoranthene		<0.005	mg/L	1	0.005
7,12-Dimethylbenz(a)anthracene		<0.005	mg/L	1	0.005
Benzo(k)fluoranthene		<0.005	mg/L	1	0.005
Benzo(a)pyrene		<0.005	mg/L	1	0.005
3-Methylcholanthrene		<0.005	mg/L	1	0.005
Dibenzo(a,j)acridine		<0.005	mg/L	1	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	1	0.005
Dibenzo(a,h)anthracene		<0.005	mg/L	1	0.005
Benzo(g,h,i)perylene		<0.005	mg/L	1	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		12.25	mg/L	1	80	15	8 - 73
Phenol-d5		8.57	mg/L	1	80	10	8 - 62
Nitrobenzene-d5	[1]	24.44	mg/L	1	80	30	44 - 109
2-Fluorobiphenyl	[2]	24.75	mg/L	1	80	30	45 - 109
2,4,6-Tribromophenol		31.35	mg/L	1	80	39	39 - 132
Terphenyl-d14		49.78	mg/L	1	80	62	46 - 121

[1]Surrogates out of control limits. Process is in control according to other surrogates.
[2]Surrogates out of control limits. Process is in control according to other surrogates.

Sample: 164117 - 0143-HMW36-0101

Analysis:	8270	Analytical Method:	S 8270C	QC Batch:	QC09144	Date Analyzed:	2/12/01
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB07873	Date Prepared:	2/6/01

Param	Flag	Result	Units	Dilution	RDL
Pyridine		<0.005	mg/L	1	0.005
n-Nitrosodimethylamine		<0.005	mg/L	1	0.005
2-Picoline		<0.005	mg/L	1	0.005
Methyl methanesulfonate		<0.005	mg/L	1	0.005
Ethyl methanesulfonate		<0.005	mg/L	1	0.005
Phenol		<0.005	mg/L	1	0.005
Aniline		<0.005	mg/L	1	0.005
bis (2-chloroethyl) ether		<0.005	mg/L	1	0.005
2-Chlorophenol		<0.005	mg/L	1	0.005
1,3-Dichlorobenzene		<0.005	mg/L	1	0.005
1,4-Dichlorobenzene		<0.005	mg/L	1	0.005
Benzyl alcohol		<0.005	mg/L	1	0.005
1,2-Dichlorobenzene		<0.005	mg/L	1	0.005
2-Methylphenol		<0.005	mg/L	1	0.005
bis (2-chloroisopropyl) ether		<0.005	mg/L	1	0.005
4-Methylphenol/3-Methylphenol		<0.005	mg/L	1	0.005
Acetophenone		<0.005	mg/L	1	0.005
n-Nitrosodi-n-propylamine		<0.005	mg/L	1	0.005
Hexachloroethane		<0.005	mg/L	1	0.005
Nitrobenzene		<0.005	mg/L	1	0.005
n-Nitrosopiperidine		<0.005	mg/L	1	0.005
Isophorone		<0.005	mg/L	1	0.005
2-Nitrophenol		<0.005	mg/L	1	0.005
2,4-Dimethylphenol		<0.005	mg/L	1	0.005
bis (2-chloroethoxy) methane		<0.005	mg/L	1	0.005
Benzoic acid		<0.005	mg/L	1	0.005
2,4-Dichlorophenol		<0.005	mg/L	1	0.005
1,2,4-Trichlorobenzene		<0.005	mg/L	1	0.005
a,a-Dimethylphenethylamine		<0.005	mg/L	1	0.005
Naphthalene		<0.005	mg/L	1	0.005
4-Chloroaniline		<0.005	mg/L	1	0.005
2,6-Dichlorophenol		<0.005	mg/L	1	0.005
Hexachlorobutadiene		<0.005	mg/L	1	0.005
n-Nitroso-di-n-butylamine		<0.005	mg/L	1	0.005
4-Chloro-3-methylphenol		<0.005	mg/L	1	0.005
1-Methylnaphthalene		<0.005	mg/L	1	0.005
2-Methylnaphthalene		<0.005	mg/L	1	0.005
1,2,4,5-Tetrachlorobenzene		<0.005	mg/L	1	0.005
Hexachlorocyclopentadiene		<0.005	mg/L	1	0.005
2,4,6-Trichlorophenol		<0.005	mg/L	1	0.005
2,4,5-Trichlorophenol		<0.005	mg/L	1	0.005
2-Chloronaphthalene		<0.005	mg/L	1	0.005
1-Chloronaphthalene		<0.005	mg/L	1	0.005
2-Nitroaniline		<0.005	mg/L	1	0.005
Dimethylphthalate		<0.005	mg/L	1	0.005
Acenaphthylene		<0.005	mg/L	1	0.005
2,6-Dinitrotoluene		<0.005	mg/L	1	0.005
3-Nitroaniline		<0.005	mg/L	1	0.005
Acenaphthene		<0.005	mg/L	1	0.005
2,4-Dinitrophenol		<0.005	mg/L	1	0.005
Dibenzofuran		<0.005	mg/L	1	0.005

Continued ...

... Continued Sample: 164117 Analysis: 8270

Param	Flag	Result	Units	Dilution	RDL
Pentachlorobenzene		<0.005	mg/L	1	0.005
4-Nitrophenol		<0.005	mg/L	1	0.005
1-Naphthylamine		<0.005	mg/L	1	0.005
2,4-Dinitrotoluene		<0.005	mg/L	1	0.005
2-Naphthylamine		<0.005	mg/L	1	0.005
2,3,4,6-Tetrachlorophenol		<0.005	mg/L	1	0.005
Fluorene		<0.005	mg/L	1	0.005
Diethylphthalate		<0.005	mg/L	1	0.005
4-Chlorophenyl-phenylether		<0.005	mg/L	1	0.005
4-Nitroaniline		<0.005	mg/L	1	0.005
4,6-Dinitro-2-methylphenol		<0.005	mg/L	1	0.005
Diphenylamine		<0.005	mg/L	1	0.005
Diphenylhydrazine		<0.005	mg/L	1	0.005
4-Bromophenyl-phenylether		<0.005	mg/L	1	0.005
Phenacetin		<0.005	mg/L	1	0.005
Hexachlorobenzene		<0.005	mg/L	1	0.005
4-Aminobiphenyl		<0.005	mg/L	1	0.005
Pentachlorophenol		<0.005	mg/L	1	0.005
Pentachloronitrobenzene		<0.005	mg/L	1	0.005
Pronamide		<0.005	mg/L	1	0.005
Phenanthrene		<0.005	mg/L	1	0.005
Anthracene		<0.005	mg/L	1	0.005
Di-n-butylphthalate		<0.005	mg/L	1	0.005
Fluoranthene		<0.005	mg/L	1	0.005
Benzidine		<0.005	mg/L	1	0.005
Pyrene		<0.005	mg/L	1	0.005
p-Dimethylaminoazobenzene		<0.005	mg/L	1	0.005
Butylbenzylphthalate		<0.005	mg/L	1	0.005
Benzo(a)anthracene		<0.005	mg/L	1	0.005
3,3-Dichlorobenzidine		<0.005	mg/L	1	0.005
Chrysene		<0.005	mg/L	1	0.005
Bis (2-ethylhexyl) phthalate		<0.005	mg/L	1	0.005
Di-n-octylphthalate		<0.005	mg/L	1	0.005
Benzo(b)fluoranthene		<0.005	mg/L	1	0.005
7,12-Dimethylbenz(a)anthracene		<0.005	mg/L	1	0.005
Benzo(k)fluoranthene		<0.005	mg/L	1	0.005
Benzo(a)pyrene		<0.005	mg/L	1	0.005
3-Methylcholanthrene		<0.005	mg/L	1	0.005
Dibenzo(a,j)acridine		<0.005	mg/L	1	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	1	0.005
Dibenzo(a,h)anthracene		<0.005	mg/L	1	0.005
Benzo(g,h,i)perylene		<0.005	mg/L	1	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		28.06	mg/L	1	80	35	8 - 73
Phenol-d5		20.51	mg/L	1	80	25	8 - 62
Nitrobenzene-d5		53.73	mg/L	1	80	67	44 - 109
2-Fluorobiphenyl		56.17	mg/L	1	80	70	45 - 109
2,4,6-Tribromophenol		69.80	mg/L	1	80	87	39 - 132
Terphenyl-d14		64.99	mg/L	1	80	81	46 - 121

Sample: 164119 - 0143-HMW39-0101-QC

Analysis:	8270	Analytical Method:	S 8270C	QC Batch:	QC09144	Date Analyzed:	2/12/01
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB07873	Date Prepared:	2/6/01

Param	Flag	Result	Units	Dilution	RDL
Pyridine		<0.005	mg/L	1	0.005
n-Nitrosodimethylamine		<0.005	mg/L	1	0.005
2-Picoline		<0.005	mg/L	1	0.005
Methyl methanesulfonate		<0.005	mg/L	1	0.005
Ethyl methanesulfonate		<0.005	mg/L	1	0.005
Phenol		<0.005	mg/L	1	0.005
Aniline		<0.005	mg/L	1	0.005
bis (2-chloroethyl) ether		<0.005	mg/L	1	0.005
2-Chlorophenol		<0.005	mg/L	1	0.005
1,3-Dichlorobenzene		<0.005	mg/L	1	0.005
1,4-Dichlorobenzene		<0.005	mg/L	1	0.005
Benzyl alcohol		<0.005	mg/L	1	0.005
1,2-Dichlorobenzene		<0.005	mg/L	1	0.005
2-Methylphenol		<0.005	mg/L	1	0.005
bis (2-chloroisopropyl) ether		<0.005	mg/L	1	0.005
4-Methylphenol/3-Methylphenol		<0.005	mg/L	1	0.005
Acetophenone		<0.005	mg/L	1	0.005
n-Nitrosodi-n-propylamine		<0.005	mg/L	1	0.005
Hexachloroethane		<0.005	mg/L	1	0.005
Nitrobenzene		<0.005	mg/L	1	0.005
n-Nitrosopiperidine		<0.005	mg/L	1	0.005
Isophorone		<0.005	mg/L	1	0.005
2-Nitrophenol		<0.005	mg/L	1	0.005
2,4-Dimethylphenol		<0.005	mg/L	1	0.005
bis (2-chloroethoxy) methane		<0.005	mg/L	1	0.005
Benzoic acid		<0.005	mg/L	1	0.005
2,4-Dichlorophenol		<0.005	mg/L	1	0.005
1,2,4-Trichlorobenzene		<0.005	mg/L	1	0.005
a,a-Dimethylphenethylamine		<0.005	mg/L	1	0.005
Naphthalene		<0.005	mg/L	1	0.005
4-Chloroaniline		<0.005	mg/L	1	0.005
2,6-Dichlorophenol		<0.005	mg/L	1	0.005
Hexachlorobutadiene		<0.005	mg/L	1	0.005
n-Nitroso-di-n-butylamine		<0.005	mg/L	1	0.005
4-Chloro-3-methylphenol		<0.005	mg/L	1	0.005
1-Methylnaphthalene		<0.005	mg/L	1	0.005
2-Methylnaphthalene		<0.005	mg/L	1	0.005
1,2,4,5-Tetrachlorobenzene		<0.005	mg/L	1	0.005
Hexachlorocyclopentadiene		<0.005	mg/L	1	0.005
2,4,6-Trichlorophenol		<0.005	mg/L	1	0.005
2,4,5-Trichlorophenol		<0.005	mg/L	1	0.005
2-Chloronaphthalene		<0.005	mg/L	1	0.005
1-Chloronaphthalene		<0.005	mg/L	1	0.005
2-Nitroaniline		<0.005	mg/L	1	0.005
Dimethylphthalate		<0.005	mg/L	1	0.005
Acenaphthylene		<0.005	mg/L	1	0.005
2,6-Dinitrotoluene		<0.005	mg/L	1	0.005
3-Nitroaniline		<0.005	mg/L	1	0.005
Acenaphthene		<0.005	mg/L	1	0.005
2,4-Dinitrophenol		<0.005	mg/L	1	0.005
Dibenzofuran		<0.005	mg/L	1	0.005

Continued ...

... *Continued* Sample: 164119 Analysis: 8270

Param	Flag	Result	Units	Dilution	RDL
Pentachlorobenzene		<0.005	mg/L	1	0.005
4-Nitrophenol		<0.005	mg/L	1	0.005
1-Naphthylamine		<0.005	mg/L	1	0.005
2,4-Dinitrotoluene		<0.005	mg/L	1	0.005
2-Naphthylamine		<0.005	mg/L	1	0.005
2,3,4,6-Tetrachlorophenol		<0.005	mg/L	1	0.005
Fluorene		<0.005	mg/L	1	0.005
Diethylphthalate		<0.005	mg/L	1	0.005
4-Chlorophenyl-phenylether		<0.005	mg/L	1	0.005
4-Nitroaniline		<0.005	mg/L	1	0.005
4,6-Dinitro-2-methylphenol		<0.005	mg/L	1	0.005
Diphenylamine		<0.005	mg/L	1	0.005
Diphenylhydrazine		<0.005	mg/L	1	0.005
4-Bromophenyl-phenylether		<0.005	mg/L	1	0.005
Phenacetin		<0.005	mg/L	1	0.005
Hexachlorobenzene		<0.005	mg/L	1	0.005
4-Aminobiphenyl		<0.005	mg/L	1	0.005
Pentachlorophenol		<0.005	mg/L	1	0.005
Pentachloronitrobenzene		<0.005	mg/L	1	0.005
Pronamide		<0.005	mg/L	1	0.005
Phenanthrene		<0.005	mg/L	1	0.005
Anthracene		<0.005	mg/L	1	0.005
Di-n-butylphthalate		<0.005	mg/L	1	0.005
Fluoranthene		<0.005	mg/L	1	0.005
Benzidine		<0.005	mg/L	1	0.005
Pyrene		<0.005	mg/L	1	0.005
p-Dimethylaminoazobenzene		<0.005	mg/L	1	0.005
Butylbenzylphthalate		<0.005	mg/L	1	0.005
Benzo(a)anthracene		<0.005	mg/L	1	0.005
3,3-Dichlorobenzidine		<0.005	mg/L	1	0.005
Chrysene		<0.005	mg/L	1	0.005
Bis (2-ethylhexyl) phthalate		<0.005	mg/L	1	0.005
Di-n-octylphthalate		<0.005	mg/L	1	0.005
Benzo(b)fluoranthene		<0.005	mg/L	1	0.005
7,12-Dimethylbenz(a)anthracene		<0.005	mg/L	1	0.005
Benzo(k)fluoranthene		<0.005	mg/L	1	0.005
Benzo(a)pyrene		<0.005	mg/L	1	0.005
3-Methylcholanthrene		<0.005	mg/L	1	0.005
Dibenzo(a,j)acridine		<0.005	mg/L	1	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	1	0.005
Dibenzo(a,h)anthracene		<0.005	mg/L	1	0.005
Benzo(g,h,i)perylene		<0.005	mg/L	1	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		27.31	mg/L	1	80	34	8 - 73
Phenol-d5		18.26	mg/L	1	80	22	8 - 62
Nitrobenzene-d5		52.13	mg/L	1	80	65	44 - 109
2-Fluorobiphenyl		55.85	mg/L	1	80	69	45 - 109
2,4,6-Tribromophenol		73.32	mg/L	1	80	91	39 - 132
Terphenyl-d14		76.85	mg/L	1	80	96	46 - 121

Sample: 164121 - 0143-HMW40-0101

Analysis:	8270	Analytical Method:	S 8270C	QC Batch:	QC09144	Date Analyzed:	2/12/01
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB07873	Date Prepared:	2/6/01

Param	Flag	Result	Units	Dilution	RDL
Pyridine		<0.005	mg/L	1	0.005
n-Nitrosodimethylamine		<0.005	mg/L	1	0.005
2-Picoline		<0.005	mg/L	1	0.005
Methyl methanesulfonate		<0.005	mg/L	1	0.005
Ethyl methanesulfonate		<0.005	mg/L	1	0.005
Phenol		<0.005	mg/L	1	0.005
Aniline		<0.005	mg/L	1	0.005
bis (2-chloroethyl) ether		<0.005	mg/L	1	0.005
2-Chlorophenol		<0.005	mg/L	1	0.005
1,3-Dichlorobenzene		<0.005	mg/L	1	0.005
1,4-Dichlorobenzene		<0.005	mg/L	1	0.005
Benzyl alcohol		<0.005	mg/L	1	0.005
1,2-Dichlorobenzene		<0.005	mg/L	1	0.005
2-Methylphenol		<0.005	mg/L	1	0.005
bis (2-chloroisopropyl) ether		<0.005	mg/L	1	0.005
4-Methylphenol/3-Methylphenol		<0.005	mg/L	1	0.005
Acetophenone		<0.005	mg/L	1	0.005
n-Nitrosodi-n-propylamine		<0.005	mg/L	1	0.005
Hexachloroethane		<0.005	mg/L	1	0.005
Nitrobenzene		<0.005	mg/L	1	0.005
n-Nitrosopiperidine		<0.005	mg/L	1	0.005
Isophorone		<0.005	mg/L	1	0.005
2-Nitrophenol		<0.005	mg/L	1	0.005
2,4-Dimethylphenol		<0.005	mg/L	1	0.005
bis (2-chloroethoxy) methane		<0.005	mg/L	1	0.005
Benzoic acid		<0.005	mg/L	1	0.005
2,4-Dichlorophenol		<0.005	mg/L	1	0.005
1,2,4-Trichlorobenzene		<0.005	mg/L	1	0.005
a,a-Dimethylphenethylamine		<0.005	mg/L	1	0.005
Naphthalene		<0.005	mg/L	1	0.005
4-Chloroaniline		<0.005	mg/L	1	0.005
2,6-Dichlorophenol		<0.005	mg/L	1	0.005
Hexachlorobutadiene		<0.005	mg/L	1	0.005
n-Nitroso-di-n-butylamine		<0.005	mg/L	1	0.005
4-Chloro-3-methylphenol		<0.005	mg/L	1	0.005
1-Methylnaphthalene		<0.005	mg/L	1	0.005
2-Methylnaphthalene		<0.005	mg/L	1	0.005
1,2,4,5-Tetrachlorobenzene		<0.005	mg/L	1	0.005
Hexachlorocyclopentadiene		<0.005	mg/L	1	0.005
2,4,6-Trichlorophenol		<0.005	mg/L	1	0.005
2,4,5-Trichlorophenol		<0.005	mg/L	1	0.005
2-Chloronaphthalene		<0.005	mg/L	1	0.005
1-Chloronaphthalene		<0.005	mg/L	1	0.005
2-Nitroaniline		<0.005	mg/L	1	0.005
Dimethylphthalate		<0.005	mg/L	1	0.005
Acenaphthylene		<0.005	mg/L	1	0.005
2,6-Dinitrotoluene		<0.005	mg/L	1	0.005
3-Nitroaniline		<0.005	mg/L	1	0.005
Acenaphthene		<0.005	mg/L	1	0.005
2,4-Dinitrophenol		<0.005	mg/L	1	0.005
Dibenzofuran		<0.005	mg/L	1	0.005

Continued ...

... *Continued* Sample: 164121 Analysis: 8270

Param	Flag	Result	Units	Dilution	RDL
Pentachlorobenzene		<0.005	mg/L	1	0.005
4-Nitrophenol		<0.005	mg/L	1	0.005
1-Naphthylamine		<0.005	mg/L	1	0.005
2,4-Dinitrotoluene		<0.005	mg/L	1	0.005
2-Naphthylamine		<0.005	mg/L	1	0.005
2,3,4,6-Tetrachlorophenol		<0.005	mg/L	1	0.005
Fluorene		<0.005	mg/L	1	0.005
Diethylphthalate		<0.005	mg/L	1	0.005
4-Chlorophenyl-phenylether		<0.005	mg/L	1	0.005
4-Nitroaniline		<0.005	mg/L	1	0.005
4,6-Dinitro-2-methylphenol		<0.005	mg/L	1	0.005
Diphenylamine		<0.005	mg/L	1	0.005
Diphenylhydrazine		<0.005	mg/L	1	0.005
4-Bromophenyl-phenylether		<0.005	mg/L	1	0.005
Phenacetin		<0.005	mg/L	1	0.005
Hexachlorobenzene		<0.005	mg/L	1	0.005
4-Aminobiphenyl		<0.005	mg/L	1	0.005
Pentachlorophenol		<0.005	mg/L	1	0.005
Pentachloronitrobenzene		<0.005	mg/L	1	0.005
Pronamide		<0.005	mg/L	1	0.005
Phenanthrene		<0.005	mg/L	1	0.005
Anthracene		<0.005	mg/L	1	0.005
Di-n-butylphthalate		<0.005	mg/L	1	0.005
Fluoranthene		<0.005	mg/L	1	0.005
Benzidine		<0.005	mg/L	1	0.005
Pyrene		<0.005	mg/L	1	0.005
p-Dimethylaminoazobenzene		<0.005	mg/L	1	0.005
Butylbenzylphthalate		<0.005	mg/L	1	0.005
Benzo(a)anthracene		<0.005	mg/L	1	0.005
3,3-Dichlorobenzidine		<0.005	mg/L	1	0.005
Chrysene		<0.005	mg/L	1	0.005
Bis (2-ethylhexyl) phthalate		<0.005	mg/L	1	0.005
Di-n-octylphthalate		<0.005	mg/L	1	0.005
Benzo(b)fluoranthene		<0.005	mg/L	1	0.005
7,12-Dimethylbenz(a)anthracene		<0.005	mg/L	1	0.005
Benzo(k)fluoranthene		<0.005	mg/L	1	0.005
Benzo(a)pyrene		<0.005	mg/L	1	0.005
3-Methylcholanthrene		<0.005	mg/L	1	0.005
Dibenzo(a,j)acridine		<0.005	mg/L	1	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	1	0.005
Dibenzo(a,h)anthracene		<0.005	mg/L	1	0.005
Benzo(g,h,i)perylene		<0.005	mg/L	1	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		28.49	mg/L	1	80	35	8 - 73
Phenol-d5		20.26	mg/L	1	80	25	8 - 62
Nitrobenzene-d5		51.54	mg/L	1	80	64	44 - 109
2-Fluorobiphenyl		55.15	mg/L	1	80	68	45 - 109
2,4,6-Tribromophenol		70.67	mg/L	1	80	88	39 - 132
Terphenyl-d14		59.77	mg/L	1	80	74	46 - 121

Sample: 164123 - 0143-HMW41-0101

Analysis:	8270	Analytical Method:	S 8270C	QC Batch:	QC09144	Date Analyzed:	2/12/01
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB07873	Date Prepared:	2/6/01

Param	Flag	Result	Units	Dilution	RDL
Pyridine		<0.005	mg/L	1	0.005
n-Nitrosodimethylamine		<0.005	mg/L	1	0.005
2-Picoline		<0.005	mg/L	1	0.005
Methyl methanesulfonate		<0.005	mg/L	1	0.005
Ethyl methanesulfonate		<0.005	mg/L	1	0.005
Phenol		<0.005	mg/L	1	0.005
Aniline		<0.005	mg/L	1	0.005
bis (2-chloroethyl) ether		<0.005	mg/L	1	0.005
2-Chlorophenol		<0.005	mg/L	1	0.005
1,3-Dichlorobenzene		<0.005	mg/L	1	0.005
1,4-Dichlorobenzene		<0.005	mg/L	1	0.005
Benzyl alcohol		<0.005	mg/L	1	0.005
1,2-Dichlorobenzene		<0.005	mg/L	1	0.005
2-Methylphenol		<0.005	mg/L	1	0.005
bis (2-chloroisopropyl) ether		<0.005	mg/L	1	0.005
4-Methylphenol/3-Methylphenol		<0.005	mg/L	1	0.005
Acetophenone		<0.005	mg/L	1	0.005
n-Nitrosodi-n-propylamine		<0.005	mg/L	1	0.005
Hexachloroethane		<0.005	mg/L	1	0.005
Nitrobenzene		<0.005	mg/L	1	0.005
n-Nitrosopiperidine		<0.005	mg/L	1	0.005
Isophorone		<0.005	mg/L	1	0.005
2-Nitrophenol		<0.005	mg/L	1	0.005
2,4-Dimethylphenol		<0.005	mg/L	1	0.005
bis (2-chloroethoxy) methane		<0.005	mg/L	1	0.005
Benzoic acid		<0.005	mg/L	1	0.005
2,4-Dichlorophenol		<0.005	mg/L	1	0.005
1,2,4-Trichlorobenzene		<0.005	mg/L	1	0.005
a,a-Dimethylphenethylamine		<0.005	mg/L	1	0.005
Naphthalene		<0.005	mg/L	1	0.005
4-Chloroaniline		<0.005	mg/L	1	0.005
2,6-Dichlorophenol		<0.005	mg/L	1	0.005
Hexachlorobutadiene		<0.005	mg/L	1	0.005
n-Nitroso-di-n-butylamine		<0.005	mg/L	1	0.005
4-Chloro-3-methylphenol		<0.005	mg/L	1	0.005
1-Methylnaphthalene		<0.005	mg/L	1	0.005
2-Methylnaphthalene		<0.005	mg/L	1	0.005
1,2,4,5-Tetrachlorobenzene		<0.005	mg/L	1	0.005
Hexachlorocyclopentadiene		<0.005	mg/L	1	0.005
2,4,6-Trichlorophenol		<0.005	mg/L	1	0.005
2,4,5-Trichlorophenol		<0.005	mg/L	1	0.005
2-Chloronaphthalene		<0.005	mg/L	1	0.005
1-Chloronaphthalene		<0.005	mg/L	1	0.005
2-Nitroaniline		<0.005	mg/L	1	0.005
Dimethylphthalate		<0.005	mg/L	1	0.005
Acenaphthylene		<0.005	mg/L	1	0.005
2,6-Dinitrotoluene		<0.005	mg/L	1	0.005
3-Nitroaniline		<0.005	mg/L	1	0.005
Acenaphthene		<0.005	mg/L	1	0.005
2,4-Dinitrophenol		<0.005	mg/L	1	0.005
Dibenzofuran		<0.005	mg/L	1	0.005

Continued ...

... Continued Sample: 164123 Analysis: 8270

Param	Flag	Result	Units	Dilution	RDL
Pentachlorobenzene		<0.005	mg/L	1	0.005
4-Nitrophenol		<0.005	mg/L	1	0.005
1-Naphthylamine		<0.005	mg/L	1	0.005
2,4-Dinitrotoluene		<0.005	mg/L	1	0.005
2-Naphthylamine		<0.005	mg/L	1	0.005
2,3,4,6-Tetrachlorophenol		<0.005	mg/L	1	0.005
Fluorene		<0.005	mg/L	1	0.005
Diethylphthalate		<0.005	mg/L	1	0.005
4-Chlorophenyl-phenylether		<0.005	mg/L	1	0.005
4-Nitroaniline		<0.005	mg/L	1	0.005
4,6-Dinitro-2-methylphenol		<0.005	mg/L	1	0.005
Diphenylamine		<0.005	mg/L	1	0.005
Diphenylhydrazine		<0.005	mg/L	1	0.005
4-Bromophenyl-phenylether		<0.005	mg/L	1	0.005
Phenacetin		<0.005	mg/L	1	0.005
Hexachlorobenzene		<0.005	mg/L	1	0.005
4-Aminobiphenyl		<0.005	mg/L	1	0.005
Pentachlorophenol		<0.005	mg/L	1	0.005
Pentachloronitrobenzene		<0.005	mg/L	1	0.005
Pronamide		<0.005	mg/L	1	0.005
Phenanthrene		<0.005	mg/L	1	0.005
Anthracene		<0.005	mg/L	1	0.005
Di-n-butylphthalate		<0.005	mg/L	1	0.005
Fluoranthene		<0.005	mg/L	1	0.005
Benzidine		<0.005	mg/L	1	0.005
Pyrene		<0.005	mg/L	1	0.005
p-Dimethylaminoazobenzene		<0.005	mg/L	1	0.005
Butylbenzylphthalate		<0.005	mg/L	1	0.005
Benzo(a)anthracene		<0.005	mg/L	1	0.005
3,3-Dichlorobenzidine		<0.005	mg/L	1	0.005
Chrysene		<0.005	mg/L	1	0.005
Bis (2-ethylhexyl) phthalate		<0.005	mg/L	1	0.005
Di-n-octylphthalate		<0.005	mg/L	1	0.005
Benzo(b)fluoranthene		<0.005	mg/L	1	0.005
7,12-Dimethylbenz(a)anthracene		<0.005	mg/L	1	0.005
Benzo(k)fluoranthene		<0.005	mg/L	1	0.005
Benzo(a)pyrene		<0.005	mg/L	1	0.005
3-Methylcholanthrene		<0.005	mg/L	1	0.005
Dibenzo(a,j)acridine		<0.005	mg/L	1	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	1	0.005
Dibenzo(a,h)anthracene		<0.005	mg/L	1	0.005
Benzo(g,h,i)perylene		<0.005	mg/L	1	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		32.91	mg/L	1	80	41	8 - 73
Phenol-d5		22.11	mg/L	1	80	27	8 - 62
Nitrobenzene-d5		63.00	mg/L	1	80	78	44 - 109
2-Fluorobiphenyl		67.17	mg/L	1	80	83	45 - 109
2,4,6-Tribromophenol		72.87	mg/L	1	80	91	39 - 132
Terphenyl-d14		72.77	mg/L	1	80	90	46 - 121

Quality Control Report
Method Blank

Method Blank QCBatch: QC08927

Param	Flag	Results	Units	Reporting Limit
Pyridine		<0.005	mg/L	0.005
n-Nitrosodimethylamine		<0.005	mg/L	0.005
2-Picoline		<0.005	mg/L	0.005
Methyl methanesulfonate		<0.005	mg/L	0.005
Ethyl methanesulfonate		<0.005	mg/L	0.005
Phenol		<0.005	mg/L	0.005
Aniline		<0.005	mg/L	0.005
bis (2-chloroethyl) ether		<0.005	mg/L	0.005
2-Chlorophenol		<0.005	mg/L	0.005
1,3-Dichlorobenzene		<0.005	mg/L	0.005
1,4-Dichlorobenzene		<0.005	mg/L	0.005
Benzyl alcohol		<0.005	mg/L	0.005
1,2-Dichlorobenzene		<0.005	mg/L	0.005
2-Methylphenol		<0.005	mg/L	0.005
bis (2-chloroisopropyl) ether		<0.005	mg/L	0.005
4-Methylphenol/3-Methylphenol		<0.005	mg/L	0.005
Acetophenone		<0.005	mg/L	0.005
n-Nitrosodi-n-propylamine		<0.005	mg/L	0.005
Hexachloroethane		<0.005	mg/L	0.005
Nitrobenzene		<0.005	mg/L	0.005
n-Nitrosopiperidine		<0.005	mg/L	0.005
Isophorone		<0.005	mg/L	0.005
2-Nitrophenol		<0.005	mg/L	0.005
2,4-Dimethylphenol		<0.005	mg/L	0.005
bis (2-chloroethoxy) methane		<0.005	mg/L	0.005
Benzoic acid		<0.005	mg/L	0.005
2,4-Dichlorophenol		<0.005	mg/L	0.005
1,2,4-Trichlorobenzene		<0.005	mg/L	0.005
a,a-Dimethylphenethylamine		<0.005	mg/L	0.005
Naphthalene		<0.005	mg/L	0.005
4-Chloroaniline		<0.005	mg/L	0.005
2,6-Dichlorophenol		<0.005	mg/L	0.005
Hexachlorobutadiene		<0.005	mg/L	0.005
n-Nitroso-di-n-butylamine		<0.005	mg/L	0.005
4-Chloro-3-methylphenol		<0.005	mg/L	0.005
1-Methylnaphthalene		<0.005	mg/L	0.005
2-Methylnaphthalene		<0.005	mg/L	0.005
1,2,4,5-Tetrachlorobenzene		<0.005	mg/L	0.005
Hexachlorocyclopentadiene		<0.005	mg/L	0.005
2,4,6-Trichlorophenol		<0.005	mg/L	0.005
2,4,5-Trichlorophenol		<0.005	mg/L	0.005
2-Chloronaphthalene		<0.005	mg/L	0.005
1-Chloronaphthalene		<0.005	mg/L	0.005
2-Nitroaniline		<0.005	mg/L	0.005
Dimethylphthalate		<0.005	mg/L	0.005
Acenaphthylene		<0.005	mg/L	0.005
2,6-Dinitrotoluene		<0.005	mg/L	0.005
3-Nitroaniline		<0.005	mg/L	0.005

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Param	Flag	Results	Units	Reporting Limit
Acenaphthene		<0.005	mg/L	0.005
2,4-Dinitrophenol		<0.005	mg/L	0.005
Dibenzofuran		<0.005	mg/L	0.005
Pentachlorobenzene		<0.005	mg/L	0.005
4-Nitrophenol		<0.005	mg/L	0.005
1-Naphthylamine		<0.005	mg/L	0.005
2,4-Dinitrotoluene		<0.005	mg/L	0.005
2-Naphthylamine		<0.005	mg/L	0.005
2,3,4,6-Tetrachlorophenol		<0.005	mg/L	0.005
Fluorene		<0.005	mg/L	0.005
Diethylphthalate		<0.005	mg/L	0.005
4-Chlorophenyl-phenylether		<0.005	mg/L	0.005
4-Nitroaniline		<0.005	mg/L	0.005
4,6-Dinitro-2-methylphenol		<0.005	mg/L	0.005
Diphenylamine		<0.005	mg/L	0.005
Diphenylhydrazine		<0.005	mg/L	0.005
4-Bromophenyl-phenylether		<0.005	mg/L	0.005
Phenacetin		<0.005	mg/L	0.005
Hexachlorobenzene		<0.005	mg/L	0.005
4-Aminobiphenyl		<0.005	mg/L	0.005
Pentachlorophenol		<0.005	mg/L	0.005
Pentachloronitrobenzene		<0.005	mg/L	0.005
Pronamide		<0.005	mg/L	0.005
Phenanthrene		<0.005	mg/L	0.005
Anthracene		<0.005	mg/L	0.005
Di-n-butylphthalate		<0.005	mg/L	0.005
Fluoranthene		<0.005	mg/L	0.005
Benzidine		<0.005	mg/L	0.005
Pyrene		<0.005	mg/L	0.005
p-Dimethylaminoazobenzene		<0.005	mg/L	0.005
Butylbenzylphthalate		<0.005	mg/L	0.005
Benzo(a)anthracene		<0.005	mg/L	0.005
3,3-Dichlorobenzidine		<0.005	mg/L	0.005
Chrysene		<0.005	mg/L	0.005
Bis (2-ethylhexyl) phthalate		<0.005	mg/L	0.005
Di-n-octylphthalate		<0.005	mg/L	0.005
Benzo(b)fluoranthene		<0.005	mg/L	0.005
7,12-Dimethylbenz(a)anthracene		<0.005	mg/L	0.005
Benzo(k)fluoranthene		<0.005	mg/L	0.005
Benzo(a)pyrene		<0.005	mg/L	0.005
3-Methylcholanthrene		<0.005	mg/L	0.005
Dibenzo(a,j)acridine		<0.005	mg/L	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	0.005
Dibenzo(a,h)anthracene		<0.005	mg/L	0.005
Benzo(g,h,i)perylene		<0.005	mg/L	0.005

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		19.54	mg/L	80	24	8 - 73
Phenol-d5		12.54	mg/L	80	15	8 - 62
Nitrobenzene-d5		38.64	mg/L	80	48	44 - 109
2-Fluorobiphenyl		40.28	mg/L	80	50	45 - 109
2,4,6-Tribromophenol		50.27	mg/L	80	62	39 - 132

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Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
Terphenyl-d14		48.78	mg/L	80	60	46 - 121

Method Blank QCBatch: QC09144

Param	Flag	Results	Units	Reporting Limit
Pyridine		<0.005	mg/L	0.005
n-Nitrosodimethylamine		<0.005	mg/L	0.005
2-Picoline		<0.005	mg/L	0.005
Methyl methanesulfonate		<0.005	mg/L	0.005
Ethyl methanesulfonate		<0.005	mg/L	0.005
Phenol		<0.005	mg/L	0.005
Aniline		<0.005	mg/L	0.005
bis (2-chloroethyl) ether		<0.005	mg/L	0.005
2-Chlorophenol		<0.005	mg/L	0.005
1,3-Dichlorobenzene		<0.005	mg/L	0.005
1,4-Dichlorobenzene		<0.005	mg/L	0.005
Benzyl alcohol		<0.005	mg/L	0.005
1,2-Dichlorobenzene		<0.005	mg/L	0.005
2-Methylphenol		<0.005	mg/L	0.005
bis (2-chloroisopropyl) ether		<0.005	mg/L	0.005
4-Methylphenol/3-Methylphenol		<0.005	mg/L	0.005
Acetophenone		<0.005	mg/L	0.005
n-Nitrosodi-n-propylamine		<0.005	mg/L	0.005
Hexachloroethane		<0.005	mg/L	0.005
Nitrobenzene		<0.005	mg/L	0.005
n-Nitrosopiperidine		<0.005	mg/L	0.005
Isophorone		<0.005	mg/L	0.005
2-Nitrophenol		<0.005	mg/L	0.005
2,4-Dimethylphenol		<0.005	mg/L	0.005
bis (2-chloroethoxy) methane		<0.005	mg/L	0.005
Benzoic acid		<0.005	mg/L	0.005
2,4-Dichlorophenol		<0.005	mg/L	0.005
1,2,4-Trichlorobenzene		<0.005	mg/L	0.005
a,a-Dimethylphenethylamine		<0.005	mg/L	0.005
Naphthalene		<0.005	mg/L	0.005
4-Chloroaniline		<0.005	mg/L	0.005
2,6-Dichlorophenol		<0.005	mg/L	0.005
Hexachlorobutadiene		<0.005	mg/L	0.005
n-Nitroso-di-n-butylamine		<0.005	mg/L	0.005
4-Chloro-3-methylphenol		<0.005	mg/L	0.005
1-Methylnaphthalene		<0.005	mg/L	0.005
2-Methylnaphthalene		<0.005	mg/L	0.005
1,2,4,5-Tetrachlorobenzene		<0.005	mg/L	0.005
Hexachlorocyclopentadiene		<0.005	mg/L	0.005
2,4,6-Trichlorophenol		<0.005	mg/L	0.005
2,4,5-Trichlorophenol		<0.005	mg/L	0.005
2-Chloronaphthalene		<0.005	mg/L	0.005
1-Chloronaphthalene		<0.005	mg/L	0.005
2-Nitroaniline		<0.005	mg/L	0.005
Dimethylphthalate		<0.005	mg/L	0.005
Acenaphthylene		<0.005	mg/L	0.005

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Param	Flag	Results	Units	Reporting Limit
2,6-Dinitrotoluene		<0.005	mg/L	0.005
3-Nitroaniline		<0.005	mg/L	0.005
Acenaphthene		<0.005	mg/L	0.005
2,4-Dinitrophenol		<0.005	mg/L	0.005
Dibenzofuran		<0.005	mg/L	0.005
Pentachlorobenzene		<0.005	mg/L	0.005
4-Nitrophenol		<0.005	mg/L	0.005
1-Naphthylamine		<0.005	mg/L	0.005
2,4-Dinitrotoluene		<0.005	mg/L	0.005
2-Naphthylamine		<0.005	mg/L	0.005
2,3,4,6-Tetrachlorophenol		<0.005	mg/L	0.005
Fluorene		<0.005	mg/L	0.005
Diethylphthalate		<0.005	mg/L	0.005
4-Chlorophenyl-phenylether		<0.005	mg/L	0.005
4-Nitroaniline		<0.005	mg/L	0.005
4,6-Dinitro-2-methylphenol		<0.005	mg/L	0.005
Diphenylamine		<0.005	mg/L	0.005
Diphenylhydrazine		<0.005	mg/L	0.005
4-Bromophenyl-phenylether		<0.005	mg/L	0.005
Phenacetin		<0.005	mg/L	0.005
Hexachlorobenzene		<0.005	mg/L	0.005
4-Aminobiphenyl		<0.005	mg/L	0.005
Pentachlorophenol		<0.005	mg/L	0.005
Pentachloronitrobenzene		<0.005	mg/L	0.005
Pronamide		<0.005	mg/L	0.005
Phenanthrene		<0.005	mg/L	0.005
Anthracene		<0.005	mg/L	0.005
Di-n-butylphthalate		<0.005	mg/L	0.005
Fluoranthene		<0.005	mg/L	0.005
Benzidine		<0.005	mg/L	0.005
Pyrene		<0.005	mg/L	0.005
p-Dimethylaminoazobenzene		<0.005	mg/L	0.005
Butylbenzylphthalate		<0.005	mg/L	0.005
Benzo(a)anthracene		<0.005	mg/L	0.005
3,3-Dichlorobenzidine		<0.005	mg/L	0.005
Chrysene		<0.005	mg/L	0.005
Bis (2-ethylhexyl) phthalate		<0.005	mg/L	0.005
Di-n-octylphthalate		<0.005	mg/L	0.005
Benzo(b)fluoranthene		<0.005	mg/L	0.005
7,12-Dimethylbenz(a)anthracene		<0.005	mg/L	0.005
Benzo(k)fluoranthene		<0.005	mg/L	0.005
Benzo(a)pyrene		<0.005	mg/L	0.005
3-Methylcholanthrene		<0.005	mg/L	0.005
Dibenzo(a,j)acridine		<0.005	mg/L	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	0.005
Dibenzo(a,h)anthracene		<0.005	mg/L	0.005
Benzo(g,h,i)perylene		<0.005	mg/L	0.005

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorophenol		33.40	mg/L	80	41	8 - 73
Phenol-d5		21.30	mg/L	80	26	8 - 62
Nitrobenzene-d5		67.09	mg/L	80	83	44 - 109

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Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
2-Fluorobiphenyl		71.76	mg/L	80	89	45 - 109
2,4,6-Tribromophenol		81.78	mg/L	80	102	39 - 132
Terphenyl-d14		74.81	mg/L	80	93	46 - 121

Quality Control Report
Lab Control Spikes and Duplicate Spikes

LCS QC Batch: QC08927

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Phenol		13.274	mg/L	1	80	<0.005	16		5 - 57	20
2-Chlorophenol		36.240	mg/L	1	80	<0.005	45		29 - 110	20
1,4-Dichlorobenzene		37.031	mg/L	1	80	<0.005	46		25 - 94	20
n-Nitrosodi-n-propylamine		39.153	mg/L	1	80	<0.005	48		36 - 119	20
1,2,4-Trichlorobenzene		39.316	mg/L	1	80	<0.005	49		28 - 110	20
4-Chloro-3-methylphenol		41.032	mg/L	1	80	<0.005	51		40 - 126	20
Acenaphthene		45.204	mg/L	1	80	<0.005	56		47 - 118	20
4-Nitrophenol		12.794	mg/L	1	80	<0.005	15		0 - 69	20
2,4-Dinitrotoluene		46.036	mg/L	1	80	<0.005	57		46 - 133	20
Pentachlorophenol		52.420	mg/L	1	80	<0.005	65		21 - 131	20
Pyrene		45.034	mg/L	1	80	<0.005	56		44 - 125	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
2-Fluorophenol		18.79	mg/L	1	80	23	8 - 73
Phenol-d5		11.50	mg/L	1	80	14	8 - 62
Nitrobenzene-d5		36.50	mg/L	1	80	45	44 - 109
2-Fluorobiphenyl		39.67	mg/L	1	80	49	45 - 109
2,4,6-Tribromophenol		47.76	mg/L	1	80	59	39 - 132
Terphenyl-d14		42.30	mg/L	1	80	52	46 - 121

LCSD QC Batch: QC08927

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Phenol		13.523	mg/L	1	80	<0.005	16	2	5 - 57	20
2-Chlorophenol		36.803	mg/L	1	80	<0.005	46	2	29 - 110	20
1,4-Dichlorobenzene		37.143	mg/L	1	80	<0.005	46	0	25 - 94	20
n-Nitrosodi-n-propylamine		41.803	mg/L	1	80	<0.005	52	6	36 - 119	20
1,2,4-Trichlorobenzene		39.493	mg/L	1	80	<0.005	49	0	28 - 110	20
4-Chloro-3-methylphenol		42.502	mg/L	1	80	<0.005	53	4	40 - 126	20
Acenaphthene		45.341	mg/L	1	80	<0.005	56	0	47 - 118	20
4-Nitrophenol		13.476	mg/L	1	80	<0.005	16	5	0 - 69	20

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Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
2,4-Dinitrotoluene		48.044	mg/L	1	80	<0.005	60	4	46 - 133	20
Pentachlorophenol		55.914	mg/L	1	80	<0.005	69	6	21 - 131	20
Pyrene		46.722	mg/L	1	80	<0.005	58	4	44 - 125	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
2-Fluorophenol		18.71	mg/L	1	80	23	8 - 73
Phenol-d5		11.76	mg/L	1	80	14	8 - 62
Nitrobenzene-d5		37.75	mg/L	1	80	47	44 - 109
2-Fluorobiphenyl		38.95	mg/L	1	80	48	45 - 109
2,4,6-Tribromophenol		49.41	mg/L	1	80	61	39 - 132
Terphenyl-d14		43.27	mg/L	1	80	54	46 - 121

LCS QC Batch: QC09144

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Phenol		20.844	mg/L	1	80	<0.005	26		5 - 57	20
2-Chlorophenol		60.077	mg/L	1	80	<0.005	75		29 - 110	20
1,4-Dichlorobenzene		57.494	mg/L	1	80	<0.005	71		25 - 94	20
n-Nitrosodi-n-propylamine		78.515	mg/L	1	80	<0.005	98		36 - 119	20
1,2,4-Trichlorobenzene		68.058	mg/L	1	80	<0.005	85		28 - 110	20
4-Chloro-3-methylphenol		73.621	mg/L	1	80	<0.005	92		40 - 126	20
Acenaphthene		77.638	mg/L	1	80	<0.005	97		47 - 118	20
4-Nitrophenol		21.68	mg/L	1	80	<0.005	27		0 - 69	20
2,4-Dinitrotoluene		86.381	mg/L	1	80	<0.005	107		46 - 133	20
Pentachlorophenol		71.717	mg/L	1	80	<0.005	89		21 - 131	20
Pyrene		88.665	mg/L	1	80	<0.005	110		44 - 125	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
2-Fluorophenol		30.43	mg/L	1	80	38	8 - 73
Phenol-d5		21.38	mg/L	1	80	26	8 - 62
Nitrobenzene-d5		67.56	mg/L	1	80	84	44 - 109
2-Fluorobiphenyl		70.43	mg/L	1	80	88	45 - 109
2,4,6-Tribromophenol		84.60	mg/L	1	80	105	39 - 132
Terphenyl-d14		81.26	mg/L	1	80	101	46 - 121

LCSD QC Batch: QC09144

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Phenol		20.723	mg/L	1	80	<0.005	25	0	5 - 57	20
2-Chlorophenol		60.678	mg/L	1	80	<0.005	75	1	29 - 110	20

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Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,4-Dichlorobenzene		57.707	mg/L	1	80	<0.005	72	0	25 - 94	20
n-Nitrosodi-n-propylamine		78.517	mg/L	1	80	<0.005	98	0	36 - 119	20
1,2,4-Trichlorobenzene		68.575	mg/L	1	80	<0.005	85	1	28 - 110	20
4-Chloro-3-methylphenol		75.650	mg/L	1	80	<0.005	94	3	40 - 126	20
Acenaphthene		78.164	mg/L	1	80	<0.005	97	1	47 - 118	20
4-Nitrophenol		20.15	mg/L	1	80	<0.005	25	7	0 - 69	20
2,4-Dinitrotoluene		84.906	mg/L	1	80	<0.005	106	2	46 - 133	20
Pentachlorophenol		64.658	mg/L	1	80	<0.005	80	12	21 - 131	20
Pyrene		86.344	mg/L	1	80	<0.005	107	9	44 - 125	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
2-Fluorophenol		29.89	mg/L	1	80	37	8 - 73
Phenol-d5		21.30	mg/L	1	80	26	8 - 62
Nitrobenzene-d5		66.99	mg/L	1	80	83	44 - 109
2-Fluorobiphenyl		71.33	mg/L	1	80	89	45 - 109
2,4,6-Tribromophenol		83.05	mg/L	1	80	103	39 - 132
Terphenyl-d14		78.38	mg/L	1	80	97	46 - 121

Quality Control Report
Matrix Spikes and Duplicate Spikes

MS QC Batch: QC08927

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Phenol		16.389	mg/L	1	80	<0.005	20		5 - 57	20
2-Chlorophenol		44.992	mg/L	1	80	<0.005	56		29 - 110	20
1,4-Dichlorobenzene		50.923	mg/L	1	80	<0.005	63		25 - 94	20
n-Nitrosodi-n-propylamine		85.545	mg/L	1	80	<0.005	106		36 - 119	20
1,2,4-Trichlorobenzene		59.569	mg/L	1	80	<0.005	74		28 - 110	20
4-Chloro-3-methylphenol		46.376	mg/L	1	80	<0.005	57		40 - 126	20
Acenaphthene		77.390	mg/L	1	80	<0.005	96		47 - 118	20
4-Nitrophenol	1	<5.000	mg/L	1	80	<0.005	0		0 - 69	20
2,4-Dinitrotoluene		81.960	mg/L	1	80	<0.005	102		46 - 133	20
Pentachlorophenol		67.921	mg/L	1	80	<0.005	84		21 - 131	20
Pyrene		75.085	mg/L	1	80	<0.005	93		44 - 125	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
2-Fluorophenol		21.70	mg/L	1	80	27	8 - 73
Phenol-d5		14.80	mg/L	1	80	18	8 - 62
Nitrobenzene-d5		72.14	mg/L	1	80	90	44 - 109
2-Fluorobiphenyl		51.12	mg/L	1	80	63	45 - 109

Continued ...

[1]MS/MSD values invalid. LCS/LCSD shows process is in control.

... Continued

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
2,4,6-Tribromophenol		39.20	mg/L	1	80	49	39 - 132
Terphenyl-d14		52.66	mg/L	1	80	65	46 - 121

MSD

QC Batch: QC08927

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Phenol		15.487	mg/L	1	80	<0.005	19	6	5 - 57	20
2-Chlorophenol		42.697	mg/L	1	80	<0.005	53	5	29 - 110	20
1,4-Dichlorobenzene		48.718	mg/L	1	80	<0.005	60	4	25 - 94	20
n-Nitrosodi-n-propylamine		75.344	mg/L	1	80	<0.005	94	13	36 - 119	20
1,2,4-Trichlorobenzene		56.597	mg/L	1	80	<0.005	70	5	28 - 110	20
4-Chloro-3-methylphenol		44.380	mg/L	1	80	<0.005	55	4	40 - 126	20
Acenaphthene		74.237	mg/L	1	80	<0.005	92	4	47 - 118	20
4-Nitrophenol	2	<5.000	mg/L	1	80	<0.005	0		0 - 69	20
2,4-Dinitrotoluene		86.232	mg/L	1	80	<0.005	107	5	46 - 133	20
Pentachlorophenol		68.731	mg/L	1	80	<0.005	85	1	21 - 131	20
Pyrene		74.261	mg/L	1	80	<0.005	92	1	44 - 125	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
2-Fluorophenol		20.47	mg/L	1	80	25	8 - 73
Phenol-d5		14.17	mg/L	1	80	17	8 - 62
Nitrobenzene-d5		60.32	mg/L	1	80	75	44 - 109
2-Fluorobiphenyl		49.47	mg/L	1	80	61	45 - 109
2,4,6-Tribromophenol		40.72	mg/L	1	80	50	39 - 132
Terphenyl-d14		50.33	mg/L	1	80	62	46 - 121

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QC Batch: QC08927

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Phenol		mg/L	60	62.94	104	80 - 120	2/8/01
1,4-Dichlorobenzene		mg/L	60	64.51	107	80 - 120	2/8/01
2-Nitrophenol		mg/L	60	64.01	106	80 - 120	2/8/01
2,4-Dichlorophenol		mg/L	60	64.09	106	80 - 120	2/8/01
Hexachlorobutadiene		mg/L	60	71.73	119	80 - 120	2/8/01
4-Chloro-3-methylphenol		mg/L	60	67.67	112	80 - 120	2/8/01
2,4,6-Trichlorophenol		mg/L	60	66.12	110	80 - 120	2/8/01

Continued ...

[2]MS/MSD values invalid. LCS/LCSD shows process is in control.

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Acenaphthene		mg/L	60	62.50	104	80 - 120	2/8/01
Diphenylamine		mg/L	60	59.94	99	80 - 120	2/8/01
Pentachlorophenol		mg/L	60	71.67	119	80 - 120	2/8/01
Fluoranthene		mg/L	60	67.37	112	80 - 120	2/8/01
Di-n-octylphthalate		mg/L	60	63.18	105	80 - 120	2/8/01
Benzo(a)pyrene		mg/L	60	63.76	106	80 - 120	2/8/01
2-Fluorophenol		mg/L	60	62.92	104	80 - 120	2/8/01
Phenol-d5		mg/L	60	63.28	105	80 - 120	2/8/01
Nitrobenzene-d5		mg/L	60	63.08	105	80 - 120	2/8/01
2-Fluorobiphenyl		mg/L	60	63.72	106	80 - 120	2/8/01
2,4,6-Tribromophenol		mg/L	60	71.33	118	80 - 120	2/8/01
Terphenyl-d14		mg/L	60	61.23	102	80 - 120	2/8/01

CCV (1) QC Batch: QC09144

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Phenol		mg/L	60	68.1	113	80 - 120	2/12/01
1,4-Dichlorobenzene		mg/L	60	63.31	105	80 - 120	2/12/01
2-Nitrophenol		mg/L	60	66.44	110	80 - 120	2/12/01
2,4-Dimethylphenol		mg/L	60	64.42	107	80 - 120	2/12/01
Hexachlorobutadiene		mg/L	60	70.41	117	80 - 120	2/12/01
4-Chloro-3-methylphenol		mg/L	60	69.55	115	80 - 120	2/12/01
2,4,6-Trichlorophenol		mg/L	60	67.56	112	80 - 120	2/12/01
Acenaphthene		mg/L	60	62.79	104	80 - 120	2/12/01
Diphenylamine		mg/L	60	62.01	103	80 - 120	2/12/01
Pentachlorophenol		mg/L	60	62.37	103	80 - 120	2/12/01
Fluoranthene		mg/L	60	57.33	95	80 - 120	2/12/01
Di-n-octylphthalate		mg/L	60	60.47	100	80 - 120	2/12/01
Benzo(a)pyrene		mg/L	60	63.42	105	80 - 120	2/12/01
2-Fluorophenol		mg/L	60	65.62	109	80 - 120	2/12/01
Phenol-d5		mg/L	60	69.69	116	80 - 120	2/12/01
Nitrobenzene-d5		mg/L	60	64.04	107	80 - 120	2/12/01
2-Fluorobiphenyl		mg/L	60	63.80	106	80 - 120	2/12/01
2,4,6-Tribromophenol		mg/L	60	70.51	118	80 - 120	2/12/01
Terphenyl-d14		mg/L	60	67.88	113	80 - 120	2/12/01

Explosives Results and Quality Control

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Karen Costa
Mevatec
P.O. Box 399 Bldg. 126
WSMR, NM 88002

Report Date: March 7. 2001

Order ID Number: A01013023

Project Number: 700 A21
Project Name: Groundwater Sampling HELSTF Chrome Site
Project Location: N/A

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
163945	0143-HMW13-0101-QC	Water	1/29/01	12:35	1/30/01
163947	0143-HMW11-0101	Water	1/29/01	10:29	1/30/01
163949	0143-HMW43-0101	Water	1/29/01	14:02	1/30/01
163951	0143-HMW13-0101	Water	1/29/01	12:35	1/30/01
164014	0143-HMW38-0101	Water	1/30/01	11:28	1/31/01
164016	0143-HMW37-0101	Water	1/30/01	12:00	1/31/01
164115	0143-HMW39-0101	Water	1/31/01	11:57	1/31/01
164117	0143-HMW36-0101	Water	1/31/01	11:10	1/31/01
164119	0143-HMW39-0101-QC	Water	1/31/01	11:57	1/31/01
164121	0143-HMW40-0101	Water	1/31/01	13:12	1/31/01
164123	0143-HMW41-0101	Water	1/31/01	12:20	1/31/01

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 12 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 163945 - 0143-HMW13-0101-QC

Analysis:	8330	Analytical Method:	8330-C18	QC Batch:	QC08814	Date Analyzed:	2/6/01
Analyst:	JU	Preparation Method:	3535A	Prep Batch:	PB07608	Date Prepared:	2/1/01

Param	Flag	Result	Units	Dilution	RDL
HMX		<0.25	μg/L	1	0.25
RDX		<0.25	μg/L	1	0.25
1,3,5-trinitrobenzene		<0.25	μg/L	1	0.25
1,3-dinitrobenzene		<0.25	μg/L	1	0.25
tetryl		<0.25	μg/L	1	0.25
Nitrobenzene		<0.25	μg/L	1	0.25
TNT		<0.25	μg/L	1	0.25
4-amino-DNT		<0.25	μg/L	1	0.25
2-amino-DNT		<0.25	μg/L	1	0.25
2,6-DNT		<0.25	μg/L	1	0.25
2,4-DNT		<0.25	μg/L	1	0.25
2-NT		<0.25	μg/L	1	0.25
4-NT		<0.25	μg/L	1	0.25
3-NT		<0.25	μg/L	1	0.25

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-dinitrobenzene		166	μg/L	1	500	33	27 - 143

Sample: 163947 - 0143-HMW11-0101

Analysis:	8330	Analytical Method:	8330-C18	QC Batch:	QC08814	Date Analyzed:	2/6/01
Analyst:	JU	Preparation Method:	3535A	Prep Batch:	PB07608	Date Prepared:	2/1/01

Param	Flag	Result	Units	Dilution	RDL
HMX		<0.25	μg/L	1	0.25
RDX		<0.25	μg/L	1	0.25
1,3,5-trinitrobenzene		<0.25	μg/L	1	0.25
1,3-dinitrobenzene		<0.25	μg/L	1	0.25
tetryl		<0.25	μg/L	1	0.25
Nitrobenzene		<0.25	μg/L	1	0.25
TNT		<0.25	μg/L	1	0.25
4-amino-DNT		<0.25	μg/L	1	0.25
2-amino-DNT		<0.25	μg/L	1	0.25
2,6-DNT		<0.25	μg/L	1	0.25
2,4-DNT		<0.25	μg/L	1	0.25
2-NT		<0.25	μg/L	1	0.25
4-NT		<0.25	μg/L	1	0.25
3-NT		<0.25	μg/L	1	0.25

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-dinitrobenzene		490.508	μg/L	1	500	98	27 - 143

Sample: 163949 - 0143-HMW43-0101

Analysis:	8330	Analytical Method:	8330-C18	QC Batch:	QC08814	Date Analyzed:	2/6/01
Analyst:	JU	Preparation Method:	3535A	Prep Batch:	PB07608	Date Prepared:	2/1/01

Param	Flag	Result	Units	Dilution	RDL
HMX		<0.25	μg/L	1	0.25
RDX		<0.25	μg/L	1	0.25
1,3,5-trinitrobenzene		<0.25	μg/L	1	0.25
1,3-dinitrobenzene		<0.25	μg/L	1	0.25
tetryl		<0.25	μg/L	1	0.25
Nitrobenzene		<0.25	μg/L	1	0.25
TNT		<0.25	μg/L	1	0.25
4-amino-DNT		<0.25	μg/L	1	0.25
2-amino-DNT		<0.25	μg/L	1	0.25
2,6-DNT		<0.25	μg/L	1	0.25
2,4-DNT		<0.25	μg/L	1	0.25
2-NT		<0.25	μg/L	1	0.25
4-NT		<0.25	μg/L	1	0.25
3-NT		<0.25	μg/L	1	0.25

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-dinitrobenzene		377	μg/L	1	500	75	27 - 143

Sample: 163951 - 0143-HMW13-0101

Analysis:	8330	Analytical Method:	8330-C18	QC Batch:	QC08814	Date Analyzed:	2/6/01
Analyst:	JU	Preparation Method:	3535A	Prep Batch:	PB07608	Date Prepared:	2/1/01

Param	Flag	Result	Units	Dilution	RDL
HMX		<0.25	μg/L	1	0.25
RDX		<0.25	μg/L	1	0.25
1,3,5-trinitrobenzene		<0.25	μg/L	1	0.25
1,3-dinitrobenzene		<0.25	μg/L	1	0.25
tetryl		<0.25	μg/L	1	0.25
Nitrobenzene		<0.25	μg/L	1	0.25
TNT		<0.25	μg/L	1	0.25
4-amino-DNT		<0.25	μg/L	1	0.25
2-amino-DNT		<0.25	μg/L	1	0.25
2,6-DNT		<0.25	μg/L	1	0.25
2,4-DNT		<0.25	μg/L	1	0.25
2-NT		<0.25	μg/L	1	0.25
4-NT		<0.25	μg/L	1	0.25
3-NT		<0.25	μg/L	1	0.25

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-dinitrobenzene		349	μg/L	1	500	69	27 - 143

Sample: 164014 - 0143-HMW38-0101

Analysis:	8330	Analytical Method:	8330-C18	QC Batch:	QC08953	Date Analyzed:	2/9/01
Analyst:	JU	Preparation Method:	3535A	Prep Batch:	PB07718	Date Prepared:	2/6/01

Param	Flag	Result	Units	Dilution	RDL
HMX		<0.25	μg/L	1	0.25
RDX		<0.25	μg/L	1	0.25
1,3,5-trinitrobenzene		<0.25	μg/L	1	0.25
1,3-dinitrobenzene		<0.25	μg/L	1	0.25
tetryl		<0.25	μg/L	1	0.25
Nitrobenzene		<0.25	μg/L	1	0.25
TNT		<0.25	μg/L	1	0.25
4-amino-DNT		<0.25	μg/L	1	0.25
2-amino-DNT		<0.25	μg/L	1	0.25
2,6-DNT		<0.25	μg/L	1	0.25
2,4-DNT		<0.25	μg/L	1	0.25
2-NT		<0.25	μg/L	1	0.25
4-NT		<0.25	μg/L	1	0.25
3-NT		<0.25	μg/L	1	0.25

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-dinitrobenzene		421	μg/L	1	500	84	27 - 143

Sample: 164016 - 0143-HMW37-0101

Analysis:	8330	Analytical Method:	8330-C18	QC Batch:	QC08953	Date Analyzed:	2/9/01
Analyst:	JU	Preparation Method:	3535A	Prep Batch:	PB07718	Date Prepared:	2/6/01

Param	Flag	Result	Units	Dilution	RDL
HMX		<0.25	μg/L	1	0.25
RDX		<0.25	μg/L	1	0.25
1,3,5-trinitrobenzene		<0.25	μg/L	1	0.25
1,3-dinitrobenzene		<0.25	μg/L	1	0.25
tetryl		<0.25	μg/L	1	0.25
Nitrobenzene		<0.25	μg/L	1	0.25
TNT		<0.25	μg/L	1	0.25
4-amino-DNT		<0.25	μg/L	1	0.25
2-amino-DNT		<0.25	μg/L	1	0.25
2,6-DNT		<0.25	μg/L	1	0.25
2,4-DNT		<0.25	μg/L	1	0.25
2-NT		<0.25	μg/L	1	0.25
4-NT		<0.25	μg/L	1	0.25
3-NT		<0.25	μg/L	1	0.25

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-dinitrobenzene		405	μg/L	1	500	81	27 - 143

Sample: 164115 - 0143-HMW39-0101

Analysis:	8330	Analytical Method:	8330-C18	QC Batch:	QC08953	Date Analyzed:	2/9/01
Analyst:	JU	Preparation Method:	3535A	Prep Batch:	PB07718	Date Prepared:	2/6/01

Param	Flag	Result	Units	Dilution	RDL
HMX		<0.25	μg/L	1	0.25
RDX		<0.25	μg/L	1	0.25

Continued . . .

... Continued Sample: 164115 Analysis: 8330

Param	Flag	Result	Units	Dilution	RDL
1,3,5-trinitrobenzene		<0.25	μg/L	1	0.25
1,3-dinitrobenzene		<0.25	μg/L	1	0.25
tetryl		<0.25	μg/L	1	0.25
Nitrobenzene		<0.25	μg/L	1	0.25
TNT		<0.25	μg/L	1	0.25
4-amino-DNT		<0.25	μg/L	1	0.25
2-amino-DNT		<0.25	μg/L	1	0.25
2,6-DNT		<0.25	μg/L	1	0.25
2,4-DNT		<0.25	μg/L	1	0.25
2-NT		<0.25	μg/L	1	0.25
4-NT		<0.25	μg/L	1	0.25
3-NT		<0.25	μg/L	1	0.25

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-dinitrobenzene		407	μg/L	1	500	81	27 - 143

Sample: 164117 - 0143-HMW36-0101

Analysis:	8330	Analytical Method:	8330-C18	QC Batch:	QC08953	Date Analyzed:	2/9/01
Analyst:	JU	Preparation Method:	3535A	Prep Batch:	PB07718	Date Prepared:	2/6/01

Param	Flag	Result	Units	Dilution	RDL
HMX		<0.25	μg/L	1	0.25
RDX		<0.25	μg/L	1	0.25
1,3,5-trinitrobenzene		<0.25	μg/L	1	0.25
1,3-dinitrobenzene		<0.25	μg/L	1	0.25
tetryl		<0.25	μg/L	1	0.25
Nitrobenzene		<0.25	μg/L	1	0.25
TNT		<0.25	μg/L	1	0.25
4-amino-DNT		<0.25	μg/L	1	0.25
2-amino-DNT		<0.25	μg/L	1	0.25
2,6-DNT		<0.25	μg/L	1	0.25
2,4-DNT		<0.25	μg/L	1	0.25
2-NT		<0.25	μg/L	1	0.25
4-NT		<0.25	μg/L	1	0.25
3-NT		<0.25	μg/L	1	0.25

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-dinitrobenzene		331	μg/L	1	500	66	27 - 143

Sample: 164119 - 0143-HMW39-0101-QC

Analysis:	8330	Analytical Method:	8330-C18	QC Batch:	QC08953	Date Analyzed:	2/9/01
Analyst:	JU	Preparation Method:	3535A	Prep Batch:	PB07718	Date Prepared:	2/6/01

Param	Flag	Result	Units	Dilution	RDL
HMX		<0.25	μg/L	1	0.25
RDX		<0.25	μg/L	1	0.25
1,3,5-trinitrobenzene		<0.25	μg/L	1	0.25

Continued ...

... Continued Sample: 164119 Analysis: 8330

Param	Flag	Result	Units	Dilution	RDL
1,3-dinitrobenzene		<0.25	μg/L	1	0.25
tetryl		<0.25	μg/L	1	0.25
Nitrobenzene		<0.25	μg/L	1	0.25
TNT		<0.25	μg/L	1	0.25
4-amino-DNT		<0.25	μg/L	1	0.25
2-amino-DNT		<0.25	μg/L	1	0.25
2,6-DNT		<0.25	μg/L	1	0.25
2,4-DNT		<0.25	μg/L	1	0.25
2-NT		<0.25	μg/L	1	0.25
4-NT		<0.25	μg/L	1	0.25
3-NT		<0.25	μg/L	1	0.25

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-dinitrobenzene		184	μg/L	1	500	36	27 - 143

Sample: 164121 - 0143-HMW40-0101

Analysis:	8330	Analytical Method:	8330-C18	QC Batch:	QC08953	Date Analyzed:	2/9/01
Analyst:	JU	Preparation Method:	3535A	Prep Batch:	PB07718	Date Prepared:	2/6/01

Param	Flag	Result	Units	Dilution	RDL
HMX		<0.25	μg/L	1	0.25
RDX		<0.25	μg/L	1	0.25
1,3,5-trinitrobenzene		<0.25	μg/L	1	0.25
1,3-dinitrobenzene		<0.25	μg/L	1	0.25
tetryl		<0.25	μg/L	1	0.25
Nitrobenzene		<0.25	μg/L	1	0.25
TNT		<0.25	μg/L	1	0.25
4-amino-DNT		<0.25	μg/L	1	0.25
2-amino-DNT		<0.25	μg/L	1	0.25
2,6-DNT		<0.25	μg/L	1	0.25
2,4-DNT		<0.25	μg/L	1	0.25
2-NT		<0.25	μg/L	1	0.25
4-NT		<0.25	μg/L	1	0.25
3-NT		<0.25	μg/L	1	0.25

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-dinitrobenzene		321	μg/L	1	500	64	27 - 143

Sample: 164123 - 0143-HMW41-0101

Analysis:	8330	Analytical Method:	8330-C18	QC Batch:	QC08953	Date Analyzed:	2/9/01
Analyst:	JU	Preparation Method:	3535A	Prep Batch:	PB07718	Date Prepared:	2/6/01

Param	Flag	Result	Units	Dilution	RDL
HMX		<0.25	μg/L	1	0.25
RDX		<0.25	μg/L	1	0.25
1,3,5-trinitrobenzene		<0.25	μg/L	1	0.25
1,3-dinitrobenzene		<0.25	μg/L	1	0.25

Continued ...

... Continued Sample: 164123 Analysis: 8330

Param	Flag	Result	Units	Dilution	RDL
tetryl		<0.25	μg/L	1	0.25
Nitrobenzene		<0.25	μg/L	1	0.25
TNT		<0.25	μg/L	1	0.25
4-amino-DNT		<0.25	μg/L	1	0.25
2-amino-DNT		<0.25	μg/L	1	0.25
2,6-DNT		<0.25	μg/L	1	0.25
2,4-DNT		<0.25	μg/L	1	0.25
2-NT		<0.25	μg/L	1	0.25
4-NT		<0.25	μg/L	1	0.25
3-NT		<0.25	μg/L	1	0.25

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
1,2-dinitrobenzene		359	μg/L	1	500	71	27 - 143

Quality Control Report
Method Blank

Method Blank QCBatch: QC08814

Param	Flag	Results	Units	Reporting Limit
HMX		<0.25	μg/L	0.25
RDX		<0.25	μg/L	0.25
1,3,5-trinitrobenzene		<0.25	μg/L	0.25
1,3-dinitrobenzene		<0.25	μg/L	0.25
tetryl		<0.25	μg/L	0.25
Nitrobenzene		<0.25	μg/L	0.25
TNT		<0.25	μg/L	0.25
4-amino-DNT		<0.25	μg/L	0.25
2-amino-DNT		<0.25	μg/L	0.25
2,6-DNT		<0.25	μg/L	0.25
2,4-DNT		<0.25	μg/L	0.25
2-NT		<0.25	μg/L	0.25
4-NT		<0.25	μg/L	0.25
3-NT		<0.25	μg/L	0.25

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
1,2-dinitrobenzene		430.088	μg/L	500	86	27 - 143

Method Blank QCBatch: QC08953

Param	Flag	Results	Units	Reporting Limit
HMX		<0.5	μg/L	0.25
RDX		<0.5	μg/L	0.25
1,3,5-trinitrobenzene		<0.5	μg/L	0.25
1,3-dinitrobenzene		<0.5	μg/L	0.25
tetryl		<0.5	μg/L	0.25
Nitrobenzene		<0.5	μg/L	0.25
TNT		<0.5	μg/L	0.25
4-amino-DNT		<0.5	μg/L	0.25
2-amino-DNT		<0.5	μg/L	0.25
2,6-DNT		<0.5	μg/L	0.25
2,4-DNT		<0.5	μg/L	0.25
2-NT		<0.5	μg/L	0.25
4-NT		<0.5	μg/L	0.25
3-NT		<0.5	μg/L	0.25

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
1,2-dinitrobenzene		460.71	μg/L	500	92	27 - 143

Quality Control Report
Lab Control Spikes and Duplicate Spikes

LCS QC Batch: QC08814

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
HMX		243.1	μg/L	1	500	<0.25	48		0 - 133	20
RDX		289.35	μg/L	1	500	<0.25	57		0 - 112	20
1,3,5-trinitrobenzene		360.26	μg/L	1	500	<0.25	72		0 - 185	20
1,3-dinitrobenzene		398.95	μg/L	1	500	<0.25	79		19 - 141	20
tetryl		424.53	μg/L	1	500	<0.25	84		15 - 161	20
Nitrobenzene		404.33	μg/L	1	500	<0.25	80		6 - 149	20
TNT		407.84	μg/L	1	500	<0.25	81		52 - 132	20
4-amino-DNT / 2-amino-DNT		395.35	μg/L	1	500	<0.25	79		44 - 133	20
2,6-DNT / 2,4-DNT		410.03	μg/L	1	500	<0.25	82		29 - 146	20
2-NT		426.45	μg/L	1	500	<0.25	85		48 - 139	20
4-NT		472.39	μg/L	1	500	<0.25	94		46 - 142	20
3-NT		452.91	μg/L	1	500	<0.25	90		46 - 144	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
1,2-dinitrobenzene		362.96	μg/L	1	500	72	27 - 143

LCSD QC Batch: QC08814

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
HMX		249.12	μg/L	1	500	<0.25	58	19	0 - 133	20
RDX		341.85	μg/L	1	500	<0.25	68	17	0 - 112	20
1,3,5-trinitrobenzene		437.71	μg/L	1	500	<0.25	87	19	0 - 185	20
1,3-dinitrobenzene		456.53	μg/L	1	500	<0.25	91	13	20 - 141	20
tetryl		472.71	μg/L	1	500	<0.25	94	11	15 - 161	20
Nitrobenzene		450.55	μg/L	1	500	<0.25	90	11	6 - 149	20
TNT		480.04	μg/L	1	500	<0.25	96	16	51 - 132	20
4-amino-DNT / 2-amino-DNT		463.83	μg/L	1	500	<0.25	92	16	43 - 133	20
2,6-DNT / 2,4-DNT		478.78	μg/L	1	500	<0.25	95	15	29 - 146	20
2-NT		489.35	μg/L	1	500	<0.25	97	14	48 - 139	20
4-NT		502.48	μg/L	1	500	<0.25	100	6	46 - 142	20
3-NT		494.65	μg/L	1	500	<0.25	98	9	45 - 144	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
1,2-dinitrobenzene		421.22	μg/L	1	500	84	27 - 143

LCS QC Batch: QC08953

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
HMX		341.87	μg/L	1	500	<0.5	68		0 - 133	20
RDX		358.40	μg/L	1	500	<0.5	71		0 - 112	20
1,3,5-trinitrobenzene		571.79	μg/L	1	500	<0.5	114		0 - 185	20
1,3-dinitrobenzene		467.72	μg/L	1	500	<0.5	93		19 - 141	20
tetryl		504.99	μg/L	1	500	<0.5	100		15 - 161	20
Nitrobenzene		443.58	μg/L	1	500	<0.5	88		6 - 149	20
TNT		471.97	μg/L	1	500	<0.5	94		52 - 132	20
4-amino-DNT / 2-amino-DNT		465.4	μg/L	1	500		93		44 - 133	20
2,6-DNT / 2,4-DNT		454.28	μg/L	1	500		90		29 - 146	20
2-NT		467.64	μg/L	1	500	<0.5	93		48 - 139	20
4-NT		465.98	μg/L	1	500	<0.5	93		46 - 142	20
3-NT		468.04	μg/L	1	500	<0.5	93		46 - 144	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
1,2-dinitrobenzene		492.42	μg/L	1	500	98	27 - 143

LCSD QC Batch: QC08953

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
HMX		342.15	μg/L	1	500	<0.5	68	0	0 - 133	20
RDX		387.9	μg/L	1	500	<0.5	77	8	0 - 112	20
1,3,5-trinitrobenzene		609.62	μg/L	1	500	<0.5	121	6	0 - 185	20
1,3-dinitrobenzene		503.42	μg/L	1	500	<0.5	100	7	20 - 141	20
tetryl		528.97	μg/L	1	500	<0.5	105	5	15 - 161	20
Nitrobenzene		502.33	μg/L	1	500	<0.5	100	12	6 - 149	20
TNT		542.53	μg/L	1	500	<0.5	108	14	51 - 132	20
4-amino-DNT / 2-amino-DNT		516.25	μg/L	1	500		103	10	43 - 133	20
2,6-DNT / 2,4-DNT		524.2	μg/L	1	500		104	14	29 - 146	20
2-NT		523.53	μg/L	1	500	<0.5	104	11	48 - 139	20
4-NT		518.92	μg/L	1	500	<0.5	103	11	46 - 142	20
3-NT		515.76	μg/L	1	500	<0.5	103	10	45 - 144	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
1,2-dinitrobenzene		524.63	μg/L	1	500	104	27 - 143

Quality Control Report
Continuing Calibration Verification Standards

CCV (1) QC Batch: QC08814

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		µg/L	500	517	103	85 - 115	2/6/01
RDX		µg/L	500	517.03	103	85 - 115	2/6/01
1,3,5-trinitrobenzene		µg/L	500	432.90	86	85 - 115	2/6/01
1,3-dinitrobenzene		µg/L	500	502.47	100	85 - 115	2/6/01
tetryl		µg/L	500	438.73	87	85 - 115	2/6/01
Nitrobenzene		µg/L	500	498.1	99	85 - 115	2/6/01
TNT		µg/L	500	497.5	99	85 - 115	2/6/01
4-amino-DNT / 2-amino-DNT		µg/L	500	497.82	99	85 - 115	2/6/01
2,6-DNT / 2,4-DNT		µg/L	500	495.6	99	85 - 115	2/6/01
2-NT		µg/L	500	503.46	100	85 - 115	2/6/01
4-NT		µg/L	500	454.96	90	85 - 115	2/6/01
3-NT		µg/L	500	472.71	94	85 - 115	2/6/01
1,2-dinitrobenzene		µg/L	500	484.62	96	85 - 115	2/6/01

ICV (1) QC Batch: QC08814

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		µg/L	500	512.67	102	85 - 115	2/6/01
RDX		µg/L	500	525.25	105	85 - 115	2/6/01
1,3,5-trinitrobenzene		µg/L	500	432.22	86	85 - 115	2/6/01
1,3-dinitrobenzene		µg/L	500	497.04	99	85 - 115	2/6/01
tetryl		µg/L	500	518.37	103	85 - 115	2/6/01
Nitrobenzene		µg/L	500	481.52	96	85 - 115	2/6/01
TNT		µg/L	500	504.32	100	85 - 115	2/6/01
4-amino-DNT / 2-amino-DNT		µg/L	500	504.21	100	85 - 115	2/6/01
2,6-DNT / 2,4-DNT		µg/L	500	495.81	99	85 - 115	2/6/01
2-NT		µg/L	500	482.97	96	85 - 115	2/6/01
4-NT		µg/L	500	502.31	100	85 - 115	2/6/01
3-NT		µg/L	500	489.8	97	85 - 115	2/6/01
1,2-dinitrobenzene		µg/L	500	491.58	98	85 - 115	2/6/01

CCV (1) QC Batch: QC08953

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		µg/L	500	493.67	98	85 - 115	2/9/01
RDX		µg/L	500	506.22	101	85 - 115	2/9/01
1,3,5-trinitrobenzene		µg/L	500	492.48	98	85 - 115	2/9/01
1,3-dinitrobenzene		µg/L	500	493.14	98	85 - 115	2/9/01
tetryl		µg/L	500	504.99	100	85 - 115	2/9/01
Nitrobenzene		µg/L	500	483.54	96	85 - 115	2/9/01
TNT		µg/L	500	504.42	100	85 - 115	2/9/01
4-amino-DNT / 2-amino-DNT		µg/L	500	501.87	100	85 - 115	2/9/01
2,6-DNT / 2,4-DNT		µg/L	500	503.36	100	85 - 115	2/9/01
2-NT		µg/L	500	491.54	98	85 - 115	2/9/01
4-NT		µg/L	500	487.35	97	85 - 115	2/9/01

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
3-NT		μg/L	500	496.22	99	85 - 115	2/9/01
1,2-dinitrobenzene		μg/L	500	504.54	100	85 - 115	2/9/01

ICV (1) QC Batch: QC08953

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
HMX		μg/L	500	499.97	99	85 - 115	2/9/01
RDX		μg/L	500	483.66	96	85 - 115	2/9/01
1,3,5-trinitrobenzene		μg/L	500	475.46	95	85 - 115	2/9/01
1,3-dinitrobenzene		μg/L	500	500.12	100	85 - 115	2/9/01
tetryl		μg/L	500	529	105	85 - 115	2/9/01
Nitrobenzene		μg/L	500	499.61	99	85 - 115	2/9/01
TNT		μg/L	500	495.87	99	85 - 115	2/9/01
4-amino-DNT / 2-amino-DNT		μg/L	500	482.06	96	85 - 115	2/9/01
2,6-DNT / 2,4-DNT		μg/L	500	482.63	96	85 - 115	2/9/01
2-NT		μg/L	500	516.35	103	85 - 115	2/9/01
4-NT		μg/L	500	495.75	99	85 - 115	2/9/01
3-NT		μg/L	500	494.56	98	85 - 115	2/9/01
1,2-dinitrobenzene		μg/L	500	503.2	100	85 - 115	2/9/01

Pesticides Results and Quality Control

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Karen Costa
Mevatec
P.O. Box 399 Bldg. 126
WSMR, NM 88002

Report Date: March 8, 2001

Order ID Number: A01013023

Project Number: 700 A21
Project Name: Groundwater Sampling HELSTF Chrome Site
Project Location: N/A

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
163945	0143-HMW13-0101-QC	Water	1/29/01	12:35	1/30/01
163947	0143-HMW11-0101	Water	1/29/01	10:29	1/30/01
163949	0143-HMW43-0101	Water	1/29/01	14:02	1/30/01
163951	0143-HMW13-0101	Water	1/29/01	12:35	1/30/01
164014	0143-HMW38-0101	Water	1/30/01	11:28	1/31/01
164016	0143-HMW37-0101	Water	1/30/01	12:00	1/31/01
164115	0143-HMW39-0101	Water	1/31/01	11:57	1/31/01
164117	0143-HMW36-0101	Water	1/31/01	11:10	1/31/01
164119	0143-HMW39-0101-QC	Water	1/31/01	11:57	1/31/01
164121	0143-HMW40-0101	Water	1/31/01	13:12	1/31/01
164123	0143-HMW41-0101	Water	1/31/01	12:20	1/31/01

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 16 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael T. Abel
Dr. Blair Leftwich, Director

Analytical Report

Sample: 163945 - 0143-HMW13-0101-QC

Analysis:	Pesticides	Analytical Method:	E 8081	QC Batch:	QC08989	Date Analyzed:	2/10/01
Analyst:	SH	Preparation Method:	E 3510C	Prep Batch:	PB07742	Date Prepared:	2/1/01

Param	Flag	Result	Units	Dilution	RDL
alpha-BHC		<0.0001	mg/L	1	0.0001
beta-BHC		<0.0001	mg/L	1	0.0001
gamma-BHC (Lindane)		<0.0001	mg/L	1	0.0001
delta-BHC		<0.0001	mg/L	1	0.0001
Heptachlor		<0.0002	mg/L	1	0.0002
Aldrin		<0.0001	mg/L	1	0.0001
Heptachlor Epoxide		<0.0002	mg/L	1	0.0002
gamma-Chlordane		<0.0001	mg/L	1	0.0001
Endosulfan I		<0.0001	mg/L	1	0.0001
alpha-Chlordane		<0.0001	mg/L	1	0.0001
Dieldrin		<0.0001	mg/L	1	0.0001
P,P-DDE		<0.0001	mg/L	1	0.0001
Endrin		<0.0005	mg/L	1	0.0005
Endosulfan II		<0.0001	mg/L	1	0.0001
Endrin aldehyde		<0.0005	mg/L	1	0.0005
P,P-DDD		<0.0002	mg/L	1	0.0002
Endosulfan sulfate		<0.0005	mg/L	1	0.0005
p,p-DDT		<0.0005	mg/L	1	0.0005
Endrin Ketone		<0.001	mg/L	1	0.001
Methoxychlor		<0.005	mg/L	1	0.005
Toxaphene		<0.0025	mg/L	1	0.0025

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00059	mg/L	1	0.0005	118	34 - 154
deca chlorobiphenyl		0.00015	mg/L	1	0.0005	30	1 - 92

Sample: 163947 - 0143-HMW11-0101

Analysis:	Pesticides	Analytical Method:	E 8081	QC Batch:	QC08989	Date Analyzed:	2/10/01
Analyst:	SH	Preparation Method:	E 3510C	Prep Batch:	PB07742	Date Prepared:	2/1/01

Param	Flag	Result	Units	Dilution	RDL
alpha-BHC		<0.0001	mg/L	1	0.0001
beta-BHC		<0.0001	mg/L	1	0.0001
gamma-BHC (Lindane)		<0.0001	mg/L	1	0.0001
delta-BHC		<0.0001	mg/L	1	0.0001
Heptachlor		<0.0002	mg/L	1	0.0002
Aldrin		<0.0001	mg/L	1	0.0001
Heptachlor Epoxide		<0.0002	mg/L	1	0.0002
gamma-Chlordane		<0.0001	mg/L	1	0.0001
Endosulfan I		<0.0001	mg/L	1	0.0001
alpha-Chlordane		<0.0001	mg/L	1	0.0001
Dieldrin		<0.0001	mg/L	1	0.0001
P,P-DDE		<0.0001	mg/L	1	0.0001
Endrin		<0.0005	mg/L	1	0.0005

Continued ...

... Continued Sample: 163947 Analysis: Pesticides

Param	Flag	Result	Units	Dilution	RDL
Endosulfan II		<0.0001	mg/L	1	0.0001
Endrin aldehyde		<0.0005	mg/L	1	0.0005
P,P-DDD		<0.0002	mg/L	1	0.0002
Endosulfan sulfate		<0.0005	mg/L	1	0.0005
p,p-DDT		<0.0005	mg/L	1	0.0005
Endrin Ketone		<0.001	mg/L	1	0.001
Methoxychlor		<0.005	mg/L	1	0.005
Toxaphene		<0.0025	mg/L	1	0.0025

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00053	mg/L	1	0.0005	106	34 - 154
deca chlorobiphenyl		0.00032	mg/L	1	0.0005	64	1 - 92

Sample: 163949 - 0143-HMW43-0101

Analysis:	Pesticides	Analytical Method:	E 8081	QC Batch:	QC08989	Date Analyzed:	2/10/01
Analyst:	SH	Preparation Method:	E 3510C	Prep Batch:	PB07742	Date Prepared:	2/1/01

Param	Flag	Result	Units	Dilution	RDL
alpha-BHC		<0.0001	mg/L	1	0.0001
beta-BHC		<0.0001	mg/L	1	0.0001
gamma-BHC (Lindane)		<0.0001	mg/L	1	0.0001
delta-BHC		<0.0001	mg/L	1	0.0001
Heptachlor		<0.0002	mg/L	1	0.0002
Aldrin		<0.0001	mg/L	1	0.0001
Heptachlor Epoxide		<0.0002	mg/L	1	0.0002
gamma-Chlordane		<0.0001	mg/L	1	0.0001
Endosulfan I		<0.0001	mg/L	1	0.0001
alpha-Chlordane		<0.0001	mg/L	1	0.0001
Dieldrin		<0.0001	mg/L	1	0.0001
P,P-DDE		<0.0001	mg/L	1	0.0001
Endrin		<0.0005	mg/L	1	0.0005
Endosulfan II		<0.0001	mg/L	1	0.0001
Endrin aldehyde		<0.0005	mg/L	1	0.0005
P,P-DDD		<0.0002	mg/L	1	0.0002
Endosulfan sulfate		<0.0005	mg/L	1	0.0005
p,p-DDT		<0.0005	mg/L	1	0.0005
Endrin Ketone		<0.001	mg/L	1	0.001
Methoxychlor		<0.005	mg/L	1	0.005
Toxaphene		<0.0025	mg/L	1	0.0025

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00061	mg/L	1	0.0005	122	34 - 154
deca chlorobiphenyl		0.00036	mg/L	1	0.0005	72	1 - 92

Sample: 163951 - 0143-HMW13-0101

Analysis:	Pesticides	Analytical Method:	E 8081	QC Batch:	QC08989	Date Analyzed:	2/10/01
Analyst:	SH	Preparation Method:	E 3510C	Prep Batch:	PB07742	Date Prepared:	2/1/01

Param	Flag	Result	Units	Dilution	RDL
alpha-BHC		<0.0001	mg/L	1	0.0001
beta-BHC		<0.0001	mg/L	1	0.0001
gamma-BHC (Lindane)		<0.0001	mg/L	1	0.0001
delta-BHC		<0.0001	mg/L	1	0.0001
Heptachlor		<0.0002	mg/L	1	0.0002
Aldrin		<0.0001	mg/L	1	0.0001
Heptachlor Epoxide		<0.0002	mg/L	1	0.0002
gamma-Chlordane		<0.0001	mg/L	1	0.0001
Endosulfan I		<0.0001	mg/L	1	0.0001
alpha-Chlordane		<0.0001	mg/L	1	0.0001
Dieldrin		<0.0001	mg/L	1	0.0001
P,P-DDE		<0.0001	mg/L	1	0.0001
Endrin		<0.0005	mg/L	1	0.0005
Endosulfan II		<0.0001	mg/L	1	0.0001
Endrin aldehyde		<0.0005	mg/L	1	0.0005
P,P-DDD		<0.0002	mg/L	1	0.0002
Endosulfan sulfate		<0.0005	mg/L	1	0.0005
p,p-DDT		<0.0005	mg/L	1	0.0005
Endrin Ketone		<0.001	mg/L	1	0.001
Methoxychlor		<0.005	mg/L	1	0.005
Toxaphene		<0.0025	mg/L	1	0.0025

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.0006	mg/L	1	0.0005	120	34 - 154
deca chlorobiphenyl		0.00025	mg/L	1	0.0005	50	1 - 92

Sample: 164014 - 0143-HMW38-0101

Analysis:	Pesticides	Analytical Method:	E 8081	QC Batch:	QC08989	Date Analyzed:	2/10/01
Analyst:	SH	Preparation Method:	E 3510C	Prep Batch:	PB07742	Date Prepared:	2/1/01

Param	Flag	Result	Units	Dilution	RDL
alpha-BHC		<0.0001	mg/L	1	0.0001
beta-BHC		<0.0001	mg/L	1	0.0001
gamma-BHC (Lindane)		<0.0001	mg/L	1	0.0001
delta-BHC		<0.0001	mg/L	1	0.0001
Heptachlor		<0.0002	mg/L	1	0.0002
Aldrin		<0.0001	mg/L	1	0.0001
Heptachlor Epoxide		<0.0002	mg/L	1	0.0002
gamma-Chlordane		<0.0001	mg/L	1	0.0001
Endosulfan I		<0.0001	mg/L	1	0.0001
alpha-Chlordane		<0.0001	mg/L	1	0.0001
Dieldrin		<0.0001	mg/L	1	0.0001
P,P-DDE		<0.0001	mg/L	1	0.0001
Endrin		<0.0005	mg/L	1	0.0005
Endosulfan II		<0.0001	mg/L	1	0.0001
Endrin aldehyde		<0.0005	mg/L	1	0.0005
P,P-DDD		<0.0002	mg/L	1	0.0002
Endosulfan sulfate		<0.0005	mg/L	1	0.0005
p,p-DDT		<0.0005	mg/L	1	0.0005
Endrin Ketone		<0.001	mg/L	1	0.001
Methoxychlor		<0.005	mg/L	1	0.005
Toxaphene		<0.0025	mg/L	1	0.0025

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00051	mg/L	1	0.0005	102	34 - 154
deca chlorobiphenyl		0.00031	mg/L	1	0.0005	62	1 - 92

Sample: 164016 - 0143-HMW37-0101

Analysis:	Pesticides	Analytical Method:	E 8081	QC Batch:	QC08989	Date Analyzed:	2/10/01
Analyst:	SH	Preparation Method:	E 3510C	Prep Batch:	PB07742	Date Prepared:	2/1/01

Param	Flag	Result	Units	Dilution	RDL
alpha-BHC		<0.0001	mg/L	1	0.0001
beta-BHC		<0.0001	mg/L	1	0.0001
gamma-BHC (Lindane)		<0.0001	mg/L	1	0.0001
delta-BHC		<0.0001	mg/L	1	0.0001
Heptachlor		<0.0002	mg/L	1	0.0002
Aldrin		<0.0001	mg/L	1	0.0001
Heptachlor Epoxide		<0.0002	mg/L	1	0.0002
gamma-Chlordane		<0.0001	mg/L	1	0.0001
Endosulfan I		<0.0001	mg/L	1	0.0001
alpha-Chlordane		<0.0001	mg/L	1	0.0001
Dieldrin		<0.0001	mg/L	1	0.0001
P,P-DDE		<0.0001	mg/L	1	0.0001
Endrin		<0.0005	mg/L	1	0.0005
Endosulfan II		<0.0001	mg/L	1	0.0001
Endrin aldehyde		<0.0005	mg/L	1	0.0005
P,P-DDD		<0.0002	mg/L	1	0.0002
Endosulfan sulfate		<0.0005	mg/L	1	0.0005
p,p-DDT		<0.0005	mg/L	1	0.0005
Endrin Ketone		<0.001	mg/L	1	0.001
Methoxychlor		<0.005	mg/L	1	0.005
Toxaphene		<0.0025	mg/L	1	0.0025

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00052	mg/L	1	0.0005	104	34 - 154
deca chlorobiphenyl		0.00028	mg/L	1	0.0005	56	1 - 92

Sample: 164115 - 0143-HMW39-0101

Analysis:	Pesticides	Analytical Method:	E 8081	QC Batch:	QC08990	Date Analyzed:	2/10/01
Analyst:	SH	Preparation Method:	E 3510C	Prep Batch:	PB07743	Date Prepared:	2/7/01

Param	Flag	Result	Units	Dilution	RDL
alpha-BHC		<0.0001	mg/L	1	0.0001
beta-BHC		<0.0001	mg/L	1	0.0001
gamma-BHC (Lindane)		< 0.0001	mg/L	1	0.0001
delta-BHC		<0.0001	mg/L	1	0.0001
Heptachlor		<0.0002	mg/L	1	0.0002
Aldrin		<0.0001	mg/L	1	0.0001
Heptachlor Epoxide		<0.0002	mg/L	1	0.0002
gamma-Chlordane		<0.0001	mg/L	1	0.0001
Endosulfan I		<0.0001	mg/L	1	0.0001
alpha-Chlordane		<0.0001	mg/L	1	0.0001

Continued . . .

... Continued Sample: 164115 Analysis: Pesticides

Param	Flag	Result	Units	Dilution	RDL
Dieldrin		<0.0001	mg/L	1	0.0001
P,P-DDE		<0.0001	mg/L	1	0.0001
Endrin		<0.0005	mg/L	1	0.0005
Endosulfan II		<0.0001	mg/L	1	0.0001
Endrin aldehyde		<0.0005	mg/L	1	0.0005
P,P-DDD		<0.0002	mg/L	1	0.0002
Endosulfan sulfate		<0.0005	mg/L	1	0.0005
p,p-DDT		<0.0005	mg/L	1	0.0005
Endrin Ketone		<0.001	mg/L	1	0.001
Methoxychlor		<0.005	mg/L	1	0.005
Toxaphene		<0.0025	mg/L	1	0.0025

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00044	mg/L	1	0.0005	88	34 - 154
deca chlorobiphenyl		0.00056	mg/L	1	0.0005	112	1 - 92

Sample: 164117 - 0143-HMW36-0101

Analysis:	Pesticides	Analytical Method:	E 8081	QC Batch:	QC08990	Date Analyzed:	2/10/01
Analyst:	SH	Preparation Method:	E 3510C	Prep Batch:	PB07743	Date Prepared:	2/7/01

Param	Flag	Result	Units	Dilution	RDL
alpha-BHC		<0.0001	mg/L	1	0.0001
beta-BHC		<0.0001	mg/L	1	0.0001
gamma-BHC (Lindane)		< 0.0001	mg/L	1	0.0001
delta-BHC		<0.0001	mg/L	1	0.0001
Heptachlor		<0.0002	mg/L	1	0.0002
Aldrin		<0.0001	mg/L	1	0.0001
Heptachlor Epoxide		<0.0002	mg/L	1	0.0002
gamma-Chlordane		<0.0001	mg/L	1	0.0001
Endosulfan I		<0.0001	mg/L	1	0.0001
alpha-Chlordane		<0.0001	mg/L	1	0.0001
Dieldrin		<0.0001	mg/L	1	0.0001
P,P-DDE		<0.0001	mg/L	1	0.0001
Endrin		<0.0005	mg/L	1	0.0005
Endosulfan II		<0.0001	mg/L	1	0.0001
Endrin aldehyde		<0.0005	mg/L	1	0.0005
P,P-DDD		<0.0002	mg/L	1	0.0002
Endosulfan sulfate		<0.0005	mg/L	1	0.0005
p,p-DDT		<0.0001	mg/L	1	0.0005
Endrin Ketone		<0.001	mg/L	1	0.001
Methoxychlor		<0.005	mg/L	1	0.005
Toxaphene		<0.0025	mg/L	1	0.0025

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00039	mg/L	1	0.0005	78	34 - 154
deca chlorobiphenyl		0.00038	mg/L	1	0.0005	76	1 - 92

Sample: 164119 - 0143-HMW39-0101-QC

Analysis:	Pesticides	Analytical Method:	E 8081	QC Batch:	QC08990	Date Analyzed:	2/10/01
Analyst:	SH	Preparation Method:	E 3510C	Prep Batch:	PB07743	Date Prepared:	2/7/01

Param	Flag	Result	Units	Dilution	RDL
alpha-BHC		<0.0001	mg/L	1	0.0001
beta-BHC		<0.0001	mg/L	1	0.0001
gamma-BHC (Lindane)		<0.0001	mg/L	1	0.0001
delta-BHC		<0.0001	mg/L	1	0.0001
Heptachlor		<0.0002	mg/L	1	0.0002
Aldrin		<0.0001	mg/L	1	0.0001
Heptachlor Epoxide		<0.0002	mg/L	1	0.0002
gamma-Chlordane		<0.0001	mg/L	1	0.0001
Endosulfan I		<0.0001	mg/L	1	0.0001
alpha-Chlordane		<0.0001	mg/L	1	0.0001
Dieldrin		<0.0001	mg/L	1	0.0001
P,P-DDE		<0.0001	mg/L	1	0.0001
Endrin		<0.0005	mg/L	1	0.0005
Endosulfan II		<0.0001	mg/L	1	0.0001
Endrin aldehyde		<0.0005	mg/L	1	0.0005
P,P-DDD		<0.0002	mg/L	1	0.0002
Endosulfan sulfate		<0.0005	mg/L	1	0.0005
p,p-DDT		<0.0005	mg/L	1	0.0005
Endrin Ketone		<0.001	mg/L	1	0.001
Methoxychlor		<0.005	mg/L	1	0.005
Toxaphene		<0.0025	mg/L	1	0.0025

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00037	mg/L	1	0.0005	74	34 - 154
deca chlorobiphenyl		0.00043	mg/L	1	0.0005	86	1 - 92

Sample: 164121 - 0143-HMW40-0101

Analysis:	Pesticides	Analytical Method:	E 8081	QC Batch:	QC08990	Date Analyzed:	2/10/01
Analyst:	SH	Preparation Method:	E 3510C	Prep Batch:	PB07743	Date Prepared:	2/7/01

Param	Flag	Result	Units	Dilution	RDL
alpha-BHC		<0.0001	mg/L	1	0.0001
beta-BHC		<0.0001	mg/L	1	0.0001
gamma-BHC (Lindane)		<0.0001	mg/L	1	0.0001
delta-BHC		<0.0001	mg/L	1	0.0001
Heptachlor		<0.0002	mg/L	1	0.0002
Aldrin		<0.0001	mg/L	1	0.0001
Heptachlor Epoxide		<0.0002	mg/L	1	0.0002
gamma-Chlordane		<0.0001	mg/L	1	0.0001
Endosulfan I		<0.0001	mg/L	1	0.0001
alpha-Chlordane		<0.0001	mg/L	1	0.0001
Dieldrin		<0.0001	mg/L	1	0.0001
P,P-DDE		<0.0001	mg/L	1	0.0001
Endrin		<0.0005	mg/L	1	0.0005
Endosulfan II		<0.0001	mg/L	1	0.0001
Endrin aldehyde		<0.0005	mg/L	1	0.0005
P,P-DDD		<0.0002	mg/L	1	0.0002

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... *Continued* Sample: 164121 Analysis: Pesticides

Param	Flag	Result	Units	Dilution	RDL
Endosulfan sulfate		<0.0005	mg/L	1	0.0005
p,p-DDT		<0.0005	mg/L	1	0.0005
Endrin Ketone		<0.001	mg/L	1	0.001
Methoxychlor		<0.005	mg/L	1	0.005
Toxaphene		<0.0025	mg/L	1	0.0025

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00038	mg/L	1	0.0005	76	34 - 154
deca chlorobiphenyl		0.00044	mg/L	1	0.0005	88	1 - 92

Sample: 164123 - 0143-HMW41-0101

Analysis:	Pesticides	Analytical Method:	E 8081	QC Batch:	QC08990	Date Analyzed:	2/10/01
Analyst:	SH	Preparation Method:	E 3510C	Prep Batch:	PB07743	Date Prepared:	2/7/01

Param	Flag	Result	Units	Dilution	RDL
alpha-BHC		<0.0001	mg/L	1	0.0001
beta-BHC		<0.0001	mg/L	1	0.0001
gamma-BHC (Lindane)		< 0.0001	mg/L	1	0.0001
delta-BHC		<0.0001	mg/L	1	0.0001
Heptachlor		<0.0002	mg/L	1	0.0002
Aldrin		<0.0001	mg/L	1	0.0001
Heptachlor Epoxide		<0.0002	mg/L	1	0.0002
gamma-Chlordane		<0.0001	mg/L	1	0.0001
Endosulfan I		<0.0001	mg/L	1	0.0001
alpha-Chlordane		<0.0001	mg/L	1	0.0001
Dieldrin		<0.0001	mg/L	1	0.0001
P,P-DDE		<0.0001	mg/L	1	0.0001
Endrin		<0.0005	mg/L	1	0.0005
Endosulfan II		<0.0001	mg/L	1	0.0001
Endrin aldehyde		<0.0005	mg/L	1	0.0005
P,P-DDD		<0.0002	mg/L	1	0.0002
Endosulfan sulfate		<0.0005	mg/L	1	0.0005
p,p-DDT		<0.0005	mg/L	1	0.0005
Endrin Ketone		<0.001	mg/L	1	0.001
Methoxychlor		<0.005	mg/L	1	0.005
Toxaphene		<0.0025	mg/L	1	0.0025

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2,4,5,6-Tetrachloro-m-xylene		0.00042	mg/L	1	0.0005	84	34 - 154
deca chlorobiphenyl	[1]	0.00052	mg/L	1	0.0005	104	1 - 92

[1] Surrogate demonstrates biased high recovery. Sample did not contain analytes of interest.

Quality Control Report
Method Blank

Method Blank QCBatch: QC08989

Param	Flag	Results	Units	Reporting Limit
alpha-BHC		<0.0001	mg/L	0.0001
gamma-BHC (Lindane)		<0.0001	mg/L	0.0001
beta-BHC		<0.0001	mg/L	0.0001
delta-BHC		<0.0001	mg/L	0.0001
Heptachlor		<0.0002	mg/L	0.0002
Aldrin		<0.0001	mg/L	0.0001
Heptachlor Epoxide		<0.0002	mg/L	0.0002
gamma-Chlordane		<0.0001	mg/L	0.0001
alpha-Chlordane		<0.0001	mg/L	0.0001
Endosulfan I		<0.0001	mg/L	0.0001
P,P-DDE		<0.0001	mg/L	0.0001
Dieldrin		<0.0001	mg/L	0.0001
Endrin		<0.0005	mg/L	0.0005
P,P-DDD		<0.0002	mg/L	0.0002
Endosulfan II		<0.0001	mg/L	0.0001
p,p-DDT		<0.0005	mg/L	0.0005
Endrin aldehyde		<0.0005	mg/L	0.0005
Endosulfan sulfate		<0.0005	mg/L	0.0005
Methoxychlor		<0.005	mg/L	0.005
Endrin Ketone		<0.001	mg/L	0.001
Toxaphene		<0.0025	mg/L	0.0025

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
2,4,5,6-Tetrachloro-m-xylene		0.00056	mg/L	0.0005	112	34 - 154
deca chlorobiphenyl		0.000052	mg/L	0.0005	10	1 - 92

Method Blank QCBatch: QC08990

Param	Flag	Results	Units	Reporting Limit
alpha-BHC		<0.0001	mg/L	0.0001
gamma-BHC (Lindane)		<0.0001	mg/L	0.0001
beta-BHC		<0.0001	mg/L	0.0001
delta-BHC		<0.0001	mg/L	0.0001
Heptachlor		<0.0002	mg/L	0.0002
Aldrin		<0.0001	mg/L	0.0001
Heptachlor Epoxide		<0.0002	mg/L	0.0002
gamma-Chlordane		<0.0001	mg/L	0.0001
alpha-Chlordane		<0.0001	mg/L	0.0001
Endosulfan I		<0.0001	mg/L	0.0001
P,P-DDE		<0.0001	mg/L	0.0001
Dieldrin		<0.0001	mg/L	0.0001
Endrin		<0.0005	mg/L	0.0005
P,P-DDD		<0.0002	mg/L	0.0002

Continued . . .

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Param	Flag	Results	Units	Reporting Limit
Endosulfan II		<0.0001	mg/L	0.0001
p,p-DDT		<0.0005	mg/L	0.0005
Endrin aldehyde		<0.0005	mg/L	0.0005
Endosulfan sulfate		<0.0005	mg/L	0.0005
Methoxychlor		<0.005	mg/L	0.005
Endrin Ketone		<0.001	mg/L	0.001
Toxaphene		<0.0025	mg/L	0.0025

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
2,4,5,6-Tetrachloro-m-xylene		0.00038	mg/L	0.0005	76	34 - 154
deca chlorobiphenyl		0.00031	mg/L	0.0005	62	1 - 92

Quality Control Report
Lab Control Spikes and Duplicate Spikes

LCS

QC Batch: QC08989

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
alpha-BHC		0.00078	mg/L	1	0.0005	<0.0001	156		27 - 147	20
gamma-BHC (Lindane)		0.00071	mg/L	1	0.0005	<0.0001	142		32 - 132	20
beta-BHC		0.00059	mg/L	1	0.0005	<0.0001	118		23 - 140	20
delta-BHC		0.00079	mg/L	1	0.0005	<0.0001	158		25 - 160	20
Heptachlor		0.00071	mg/L	1	0.0005	<0.0002	142		24 - 146	20
Aldrin		0.00071	mg/L	1	0.0005	<0.0001	142		15 - 137	20
Heptachlor Epoxide		0.00064	mg/L	1	0.0005	<0.0002	128		31 - 140	20
gamma-Chlordane		0.00070	mg/L	1	0.0005	<0.0001	140		15 - 150	20
alpha-Chlordane		0.00061	mg/L	1	0.0005	<0.0001	122		12 - 141	20
Endosulfan I		0.00063	mg/L	1	0.0005	<0.0001	126		1 - 146	20
P,P-DDE		0.00068	mg/L	1	0.0005	<0.0001	136		12 - 144	20
Dieldrin		0.00065	mg/L	1	0.0005	<0.0001	130		13 - 134	20
Endrin		0.00069	mg/L	1	0.0005	<0.0005	138		20 - 164	20
P,P-DDD		0.00068	mg/L	1	0.0005	<0.0002	136		18 - 147	20
Endosulfan II		0.0006	mg/L	1	0.0005	<0.0001	120		11 - 152	20
p,p-DDT		0.00064	mg/L	1	0.0005	<0.0005	128		29 - 159	20
Endrin aldehyde		0.0004	mg/L	1	0.0005	<0.0005	80		11 - 165	20
Endosulfan sulfate		0.00065	mg/L	1	0.0005	<0.0005	130		12 - 164	20
Methoxychlor		0.00076	mg/L	1	0.0005	<0.005	152		1 - 235	20
Endrin Ketone		0.00071	mg/L	1	0.0005	<0.001	142		16 - 135	20
Toxaphene		0.00328	mg/L	1	0.01	<0.0025	32		-	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
2,4,5,6-Tetrachloro-m-xylene		0.00068	mg/L	1	0.0005	136	34 - 154
deca chlorobiphenyl		0.00025	mg/L	1	0.0005	50	1 - 92

LCSD QC Batch: QC08989

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
alpha-BHC		0.00077	mg/L	1	0.0005	<0.0001	154	1	27 - 147	20
gamma-BHC (Lindane)		0.00070	mg/L	0.005	0.0005	<0.0001	140	1	32 - 132	20
beta-BHC		0.00058	mg/L	1	0.0005	<0.0001	116	2	23 - 140	20
delta-BHC		0.00079	mg/L	1	0.0005	<0.0001	158	0	25 - 160	20
Heptachlor		0.00069	mg/L	1	0.0005	<0.0002	138	3	24 - 146	20
Aldrin		0.00070	mg/L	1	0.0005	<0.0001	140	1	15 - 137	20
Heptachlor Epoxide		0.00064	mg/L	1	0.0005	<0.0002	128	0	31 - 140	20
gamma-Chlordane		0.00069	mg/L	1	0.0005	<0.0001	138	1	15 - 150	20
alpha-Chlordane		0.00063	mg/L	1	0.0005	<0.0001	126	3	12 - 141	20
Endosulfan I		0.00065	mg/L	1	0.0005	<0.0001	130	3	1 - 146	20
P,P-DDE		0.00062	mg/L	1	0.0005	<0.0001	124	9	12 - 144	20
Dieldrin		0.00064	mg/L	1	0.0005	<0.0001	128	2	13 - 134	20
Endrin		0.00066	mg/L	1	0.0005	<0.0005	132	4	20 - 164	20
P,P-DDD		0.00067	mg/L	1	0.0005	<0.0002	134	1	18 - 147	20
Endosulfan II		0.00060	mg/L	1	0.0005	<0.0001	120	0	11 - 152	20
p,p-DDT		0.00061	mg/L	1	0.0005	<0.0005	122	5	29 - 159	20
Endrin aldehyde		0.00034	mg/L	1	0.0005	<0.0005	68	16	11 - 165	20
Endosulfan sulfate		0.00065	mg/L	1	0.0005	<0.0005	130	0	12 - 164	20
Methoxychlor		0.00077	mg/L	1	0.0005	<0.005	154	1	1 - 235	20
Endrin Ketone		0.00068	mg/L	1	0.0005	<0.001	136	4	16 - 135	20
Toxaphene		0.00357	mg/L	1	0.01	<0.0025	35	8	-	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
2,4,5,6-Tetrachloro-m-xylene		0.00072	mg/L	1	0.0005	144	34 - 154
deca chlorobiphenyl		0.00028	mg/L	1	0.0005	56	1 - 92

LCS QC Batch: QC08990

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
alpha-BHC		0.00045	mg/L	1	0.0005	<0.0001	90		27 - 147	20
gamma-BHC (Lindane)		0.00041	mg/L	1	0.0005	<0.0001	82		32 - 132	20
beta-BHC		0.00041	mg/L	1	0.0005	<0.0001	82		23 - 140	20
delta-BHC		0.00059	mg/L	1	0.0005	<0.0001	118		25 - 160	20
Heptachlor		0.00042	mg/L	1	0.0005	<0.0002	84		24 - 146	20
Aldrin		0.00041	mg/L	1	0.0005	<0.0001	82		15 - 137	20
Heptachlor Epoxide		0.00044	mg/L	1	0.0005	<0.0002	88		31 - 140	20
gamma-Chlordane		0.00047	mg/L	1	0.0005	<0.0001	94		15 - 150	20
alpha-Chlordane		0.00041	mg/L	1	0.0005	<0.0001	82		12 - 141	20
Endosulfan I		0.00049	mg/L	1	0.0005	<0.0001	98		1 - 146	20
P,P-DDE		0.00048	mg/L	1	0.0005	<0.0001	96		12 - 144	20
Dieldrin		0.00044	mg/L	1	0.0005	<0.0001	88		13 - 134	20
Endrin		0.00051	mg/L	1	0.0005	<0.0005	102		20 - 164	20
P,P-DDD		0.00051	mg/L	1	0.0005	<0.0002	102		18 - 147	20
Endosulfan II		0.0005	mg/L	1	0.0005	<0.0001	100		11 - 152	20
p,p-DDT		0.00051	mg/L	1	0.0005	<0.0005	102		29 - 159	20

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Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Endrin aldehyde		0.00029	mg/L	1	0.0005	<0.0005	58		11 - 165	20
Endosulfan sulfate		0.00049	mg/L	1	0.0005	<0.0005	98		12 - 164	20
Methoxychlor		0.00044	mg/L	1	0.0005	<0.005	88		1 - 235	20
Endrin Ketone		0.00052	mg/L	1	0.0005	<0.001	104		16 - 135	20
Toxaphene		0.00412	mg/L	1	0.01	<0.0025	41		-	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
2,4,5,6-Tetrachloro-m-xylene		0.00040	mg/L	1	0.0005	80	34 - 154
deca chlorobiphenyl		0.00043	mg/L	1	0.0005	86	1 - 92

LCSD

QC Batch: QC08990

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
alpha-BHC		0.0005	mg/L	1	0.0005	<0.0001	100	10	27 - 147	20
gamma-BHC (Lindane)		0.00048	mg/L	1	0.0005	<0.0001	96	16	32 - 132	20
beta-BHC		0.00046	mg/L	1	0.0005	<0.0001	92	11	23 - 140	20
delta-BHC		0.00053	mg/L	1	0.0005	<0.0001	106	11	25 - 160	20
Heptachlor		0.00046	mg/L	1	0.0005	<0.0002	92	9	24 - 146	20
Aldrin		0.00048	mg/L	1	0.0005	<0.0001	96	16	15 - 137	20
Heptachlor Epoxide		0.00045	mg/L	1	0.0005	<0.0002	90	2	31 - 140	20
gamma-Chlordane		0.00049	mg/L	1	0.0005	<0.0001	98	4	15 - 150	20
alpha-Chlordane		0.00045	mg/L	1	0.0005	<0.0001	90	9	12 - 141	20
Endosulfan I		0.00051	mg/L	1	0.0005	<0.0001	102	4	1 - 146	20
P,P-DDE		0.0005	mg/L	1	0.0005	<0.0001	100	4	12 - 144	20
Dieldrin		0.00052	mg/L	1	0.0005	<0.0001	104	17	13 - 134	20
Endrin		0.00049	mg/L	1	0.0005	<0.0005	98	4	20 - 164	20
P,P-DDD		0.00049	mg/L	1	0.0005	<0.0002	98	4	18 - 147	20
Endosulfan II		0.00046	mg/L	1	0.0005	<0.0001	92	8	11 - 152	20
p,p-DDT		0.00044	mg/L	1	0.0005	<0.0005	88	15	29 - 159	20
Endrin aldehyde		0.00032	mg/L	1	0.0005	<0.0005	64	10	11 - 165	20
Endosulfan sulfate		0.00046	mg/L	1	0.0005	<0.0005	92	6	12 - 164	20
Methoxychlor		0.00039	mg/L	1	0.0005	<0.005	78	12	1 - 235	20
Endrin Ketone		0.00050	mg/L	1	0.0005	<0.001	100	4	16 - 135	20
Toxaphene		0.00395	mg/L	1	0.01	<0.0025	39	4	-	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
2,4,5,6-Tetrachloro-m-xylene		0.00043	mg/L	1	0.0005	86	34 - 154
deca chlorobiphenyl		0.00042	mg/L	1	0.0005	84	1 - 92

Quality Control Report
Matrix Spikes and Duplicate Spikes

MS QC Batch: QC08989

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
alpha-BHC		0.0007	mg/L	1	0.0005	<0.0001	140		27 - 147	20
gamma-BHC (Lindane)		0.00066	mg/L	1	0.0005	<0.0001	132		32 - 132	20
beta-BHC		0.00054	mg/L	1	0.0005	<0.0001	108		23 - 140	20
delta-BHC		0.00077	mg/L	1	0.0005	<0.0001	154		25 - 160	20
Heptachlor		0.00066	mg/L	1	0.0005	<0.0002	132		24 - 146	20
Aldrin		0.00065	mg/L	1	0.0005	<0.0001	130		15 - 137	20
Heptachlor Epoxide		0.00060	mg/L	1	0.0005	<0.0002	120		31 - 140	20
gamma-Chlordane		0.00066	mg/L	1	0.0005	<0.0001	132		15 - 150	20
alpha-Chlordane		0.00057	mg/L	1	0.0005	<0.0001	114		12 - 141	20
Endosulfan I		0.00058	mg/L	1	0.0005	<0.0001	116		1 - 146	20
P,P-DDE		0.00058	mg/L	1	0.0005	<0.0001	116		12 - 144	20
Dieldrin		0.00060	mg/L	1	0.0005	<0.0001	120		13 - 134	20
Endrin		0.00060	mg/L	1	0.0005	<0.0005	120		20 - 164	20
P,P-DDD		0.00062	mg/L	1	0.0005	<0.0002	124		18 - 147	20
Endosulfan II		0.00059	mg/L	1	0.0005	<0.0001	118		11 - 152	20
p,p-DDT		0.00062	mg/L	1	0.0005	<0.0005	124		29 - 159	20
Endrin aldehyde		0.00033	mg/L	1	0.0005	<0.0005	66		11 - 165	20
Endosulfan sulfate		0.00055	mg/L	1	0.0005	<0.0005	110		12 - 164	20
Methoxychlor		0.00071	mg/L	1	0.0005	<0.005	142		1 - 235	20
Endrin Ketone		0.00056	mg/L	1	0.0005	<0.001	112		16 - 135	20
Toxaphene	[2]	Note	mg/L	1	0.01	<0.0025	0		-	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
2,4,5,6-Tetrachloro-m-xylene		0.00063	mg/L	1	0.0005	126	34 - 154
deca chlorobiphenyl		0.00028	mg/L	1	0.0005	56	1 - 92

MSD QC Batch: QC08989

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
alpha-BHC		0.00064	mg/L	1	0.0005	<0.0001	128	9	27 - 147	20
gamma-BHC (Lindane)		0.00059	mg/L	1	0.0005	<0.0001	118	11	32 - 132	20
beta-BHC		0.0005	mg/L	1	0.0005	<0.0001	100	8	23 - 140	20
delta-BHC		0.00069	mg/L	1	0.0005	<0.0001	138	11	25 - 160	20
Heptachlor		0.00061	mg/L	1	0.0005	<0.0002	122	8	24 - 146	20
Aldrin		0.00061	mg/L	1	0.0005	<0.0001	122	6	15 - 137	20
Heptachlor Epoxide		0.00052	mg/L	1	0.0005	<0.0002	104	14	31 - 140	20
gamma-Chlordane		0.00057	mg/L	1	0.0005	<0.0001	114	15	15 - 150	20
alpha-Chlordane		0.00053	mg/L	1	0.0005	<0.0001	106	7	12 - 141	20
Endosulfan I		0.00058	mg/L	1	0.0005	<0.0001	116	0	1 - 146	20
P,P-DDE		0.00057	mg/L	1	0.0005	<0.0001	114	2	12 - 144	20
Dieldrin		0.00054	mg/L	1	0.0005	<0.0001	108	10	13 - 134	20
Endrin		0.00053	mg/L	1	0.0005	<0.0005	106	12	20 - 164	20
P,P-DDD		0.00059	mg/L	1	0.0005	<0.0002	118	5	18 - 147	20
Endosulfan II		0.00052	mg/L	1	0.0005	<0.0001	104	13	11 - 152	20

Continued . . .

[2]Not recovered due to matrix interferences. LCS/LCSD shows process is in control.

... Continued

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
p,p-DDT		0.0005	mg/L	1	0.0005	<0.0005	100	21	29 - 159	20
Endrin aldehyde		0.00026	mg/L	1	0.0005	<0.0005	52	24	11 - 165	20
Endosulfan sulfate		0.00054	mg/L	1	0.0005	<0.0005	108	2	12 - 164	20
Methoxychlor		0.00064	mg/L	1	0.0005	<0.005	128	10	1 - 235	20
Endrin Ketone		0.0005	mg/L	1	0.0005	<0.001	100	11	16 - 135	20
Toxaphene	3	Note	mg/L	1	0.01	<0.0025	0		-	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
2,4,5,6-Tetrachloro-m-xylene		0.00066	mg/L	1	0.0005	132	34 - 154
deca chlorobiphenyl		0.00032	mg/L	1	0.0005	64	1 - 92

Quality Control Report
Continuing Calibration Verification Standards

CCV (1) QC Batch: QC08989

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
alpha-BHC		mg/L	0.10	0.1085	108	85 - 115	2/10/01
gamma-BHC (Lindane)		mg/L	0.10	0.1042	104	85 - 115	2/10/01
beta-BHC		mg/L	0.10	0.0962	96	85 - 115	2/10/01
delta-BHC		mg/L	0.10	0.1037	104	85 - 115	2/10/01
Heptachlor		mg/L	0.10	0.1054	105	85 - 115	2/10/01
Aldrin		mg/L	0.10	0.1096	110	85 - 115	2/10/01
Heptachlor Epoxide		mg/L	0.10	0.0973	97	85 - 115	2/10/01
gamma-Chlordane		mg/L	0.10	0.1082	108	85 - 115	2/10/01
alpha-Chlordane		mg/L	0.10	0.0951	95	85 - 115	2/10/01
Endosulfan I		mg/L	0.10	0.1057	105	85 - 115	2/10/01
P,P-DDE		mg/L	0.10	0.0994	99	85 - 115	2/10/01
Dieldrin		mg/L	0.10	0.0916	91	85 - 115	2/10/01
Endrin		mg/L	0.10	0.0958	95	85 - 115	2/10/01
P,P-DDD		mg/L	0.10	0.1033	103	85 - 115	2/10/01
Endosulfan II		mg/L	0.10	0.1030	103	85 - 115	2/10/01
p,p-DDT		mg/L	0.10	0.1026	103	85 - 115	2/10/01
Endrin aldehyde		mg/L	0.10	0.1078	108	85 - 115	2/10/01
Endosulfan sulfate		mg/L	0.10	0.0958	95	85 - 115	2/10/01
Methoxychlor		mg/L	0.10	0.1120	112	85 - 115	2/10/01
Endrin Ketone		mg/L	0.10	0.1095	110	85 - 115	2/10/01
Toxaphene	4	mg/L	2	1.419	70	85 - 115	2/10/01

ICV (1) QC Batch: QC08989

[3]Not recovered due to matrix interferences. LCS/LCSD shows process is in control.
[4]Out of control range due to irradic response.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
alpha-BHC		mg/L	0.10	0.1046	104	85 - 115	2/10/01
gamma-BHC (Lindane)		mg/L	0.10	0.099	99	85 - 115	2/10/01
beta-BHC		mg/L	0.10	0.0869	86	85 - 115	2/10/01
delta-BHC		mg/L	0.10	0.0974	97	85 - 115	2/10/01
Heptachlor		mg/L	0.10	0.0991	99	85 - 115	2/10/01
Aldrin		mg/L	0.10	0.1039	103	85 - 115	2/10/01
Heptachlor Epoxide		mg/L	0.10	0.094	94	85 - 115	2/10/01
gamma-Chlordane		mg/L	0.10	0.1043	104	85 - 115	2/10/01
alpha-Chlordane		mg/L	0.10	0.0915	91	85 - 115	2/10/01
Endosulfan I		mg/L	0.10	0.1005	100	85 - 115	2/10/01
P,P-DDE		mg/L	0.10	0.0873	87	85 - 115	2/10/01
Dieldrin		mg/L	0.10	0.091	91	85 - 115	2/10/01
Endrin		mg/L	0.10	0.0867	86	85 - 115	2/10/01
P,P-DDD		mg/L	0.10	0.0871	87	85 - 115	2/10/01
Endosulfan II		mg/L	0.10	0.092	92	85 - 115	2/10/01
p,p-DDT		mg/L	0.10	0.0918	92	85 - 115	2/10/01
Endrin aldehyde		mg/L	0.10	0.0988	98	85 - 115	2/10/01
Endosulfan sulfate		mg/L	0.10	0.0896	89	85 - 115	2/10/01
Methoxychlor		mg/L	0.10	0.1076	108	85 - 115	2/10/01
Endrin Ketone		mg/L	0.10	0.099	99	85 - 115	2/10/01
Toxaphene	[5]	mg/L	2	1.5616	78	85 - 115	2/10/01

CCV (1) QC Batch: QC08990

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
alpha-BHC		mg/L	0.10	0.1087	108	85 - 115	2/10/01
gamma-BHC (Lindane)		mg/L	0.10	0.1057	105	85 - 115	2/10/01
beta-BHC		mg/L	0.10	0.0985	98	85 - 115	2/10/01
delta-BHC		mg/L	0.10	0.1041	104	85 - 115	2/10/01
Heptachlor		mg/L	0.10	0.1047	104	85 - 115	2/10/01
Aldrin		mg/L	0.10	0.1075	107	85 - 115	2/10/01
Heptachlor Epoxide		mg/L	0.10	0.0991	99	85 - 115	2/10/01
gamma-Chlordane		mg/L	0.10	0.1120	112	85 - 115	2/10/01
alpha-Chlordane		mg/L	0.10	0.0982	98	85 - 115	2/10/01
Endosulfan I		mg/L	0.10	0.1104	110	85 - 115	2/10/01
P,P-DDE		mg/L	0.10	0.1083	108	85 - 115	2/10/01
Dieldrin		mg/L	0.10	0.1140	114	85 - 115	2/10/01
Endrin		mg/L	0.10	0.0988	98	85 - 115	2/10/01
P,P-DDD		mg/L	0.10	0.1091	109	85 - 115	2/10/01
Endosulfan II		mg/L	0.10	0.1071	107	85 - 115	2/10/01
p,p-DDT		mg/L	0.10	0.1016	101	85 - 115	2/10/01
Endrin aldehyde		mg/L	0.10	0.0880	88	85 - 115	2/10/01
Endosulfan sulfate		mg/L	0.10	0.1006	100	85 - 115	2/10/01
Methoxychlor		mg/L	0.10	0.1159	115	85 - 115	2/10/01
Endrin Ketone		mg/L	0.10	0.1171	117	85 - 115	2/10/01
Toxaphene	[6]	mg/L	2	1.1872	59	85 - 115	2/10/01

[5] Out of control range due to irradic response.
[6] Out of control range due to irradic response.

ICV (1) QC Batch: QC08990

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
alpha-BHC		mg/L	0.10	0.1046	104	85 - 115	2/10/01
gamma-BHC (Lindane)		mg/L	0.10	0.0990	99	85 - 115	2/10/01
beta-BHC		mg/L	0.10	0.0869	86	85 - 115	2/10/01
delta-BHC		mg/L	0.10	0.0974	97	85 - 115	2/10/01
Heptachlor		mg/L	0.10	0.0991	99	85 - 115	2/10/01
Aldrin		mg/L	0.10	0.1039	103	85 - 115	2/10/01
Heptachlor Epoxide		mg/L	0.10	0.0940	94	85 - 115	2/10/01
gamma-Chlordane		mg/L	0.10	0.1043	104	85 - 115	2/10/01
alpha-Chlordane		mg/L	0.10	0.0915	91	85 - 115	2/10/01
Endosulfan I		mg/L	0.10	0.1005	100	85 - 115	2/10/01
P,P-DDE		mg/L	0.10	0.0873	87	85 - 115	2/10/01
Dieldrin		mg/L	0.10	0.0910	91	85 - 115	2/10/01
Endrin		mg/L	0.10	0.0867	86	85 - 115	2/10/01
P,P-DDD		mg/L	0.10	0.0871	87	85 - 115	2/10/01
Endosulfan II		mg/L	0.10	0.0920	92	85 - 115	2/10/01
p,p-DDT		mg/L	0.10	0.0918	92	85 - 115	2/10/01
Endrin aldehyde		mg/L	0.10	0.0988	99	85 - 115	2/10/01
Endosulfan sulfate		mg/L	0.10	0.0896	89	85 - 115	2/10/01
Methoxychlor		mg/L	0.10	0.1076	108	85 - 115	2/10/01
Endrin Ketone		mg/L	0.10	0.0990	99	85 - 115	2/10/01
Toxaphene	[7]	mg/L	2	1.5619	78	85 - 115	2/10/01

[7] Out of control range due to irradic response.

TOC Results and Quality Control

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Karen Costa
Mevatec
P.O. Box 399 Bldg. 126
WSMR, NM 88002

Report Date: March 6, 2001

Order ID Number: A01013023

Project Number: 700 A21
Project Name: Groundwater Sampling HELSTF Chrome Site
Project Location: N/A

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
163945	0143-HMW13-0101-QC	Water	1/29/01	12:35	1/30/01
163947	0143-HMW11-0101	Water	1/29/01	10:29	1/30/01
163949	0143-HMW43-0101	Water	1/29/01	14:02	1/30/01
163951	0143-HMW13-0101	Water	1/29/01	12:35	1/30/01
164014	0143-HMW38-0101	Water	1/30/01	11:28	1/31/01
164016	0143-HMW37-0101	Water	1/30/01	12:00	1/31/01
164115	0143-HMW39-0101	Water	1/31/01	11:57	1/31/01
164117	0143-HMW36-0101	Water	1/31/01	11:10	1/31/01
164119	0143-HMW39-0101-QC	Water	1/31/01	11:57	1/31/01
164121	0143-HMW40-0101	Water	1/31/01	13:12	1/31/01
164123	0143-HMW41-0101	Water	1/31/01	12:20	1/31/01

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 6 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael T. Abel
Dr. Blair Leftwich, Director

Analytical Report

Sample: 163945 - 0143-HMW13-0101-QC

Analysis:	TOC	Analytical Method:	S 415.1	QC Batch:	QC08943	Date Analyzed:	2/7/01
Analyst:	RC	Preparation Method:	N/A	Prep Batch:	PB07708	Date Prepared:	2/7/01

Param	Flag	Result	Units	Dilution	RDL
Total Organic Carbon		1.64	mg/L	1	1

Sample: 163947 - 0143-HMW11-0101

Analysis:	TOC	Analytical Method:	S 415.1	QC Batch:	QC08943	Date Analyzed:	2/7/01
Analyst:	RC	Preparation Method:	N/A	Prep Batch:	PB07708	Date Prepared:	2/7/01

Param	Flag	Result	Units	Dilution	RDL
Total Organic Carbon		2.93	mg/L	1	1

Sample: 163949 - 0143-HMW43-0101

Analysis:	TOC	Analytical Method:	S 415.1	QC Batch:	QC08943	Date Analyzed:	2/7/01
Analyst:	RC	Preparation Method:	N/A	Prep Batch:	PB07708	Date Prepared:	2/7/01

Param	Flag	Result	Units	Dilution	RDL
Total Organic Carbon		2.55	mg/L	1	1

Sample: 163951 - 0143-HMW13-0101

Analysis:	TOC	Analytical Method:	S 415.1	QC Batch:	QC08943	Date Analyzed:	2/7/01
Analyst:	RC	Preparation Method:	N/A	Prep Batch:	PB07708	Date Prepared:	2/7/01

Param	Flag	Result	Units	Dilution	RDL
Total Organic Carbon		2.9	mg/L	1	1

Sample: 164014 - 0143-HMW38-0101

Analysis:	TOC	Analytical Method:	S 415.1	QC Batch:	QC08944	Date Analyzed:	2/7/01
Analyst:	RC	Preparation Method:	N/A	Prep Batch:	PB07708	Date Prepared:	2/7/01

Param	Flag	Result	Units	Dilution	RDL
Total Organic Carbon		2.76	mg/L	1	1

Sample: 164016 - 0143-HMW37-0101

Analysis:	TOC	Analytical Method:	S 415.1	QC Batch:	QC08944	Date Analyzed:	2/7/01
Analyst:	RC	Preparation Method:	N/A	Prep Batch:	PB07708	Date Prepared:	2/7/01

Param	Flag	Result	Units	Dilution	RDL
Total Organic Carbon		1.55	mg/L	1	1

Sample: 164115 - 0143-HMW39-0101

Analysis:	TOC	Analytical Method:	S 415.1	QC Batch:	QC08944	Date Analyzed:	2/7/01
Analyst:	RC	Preparation Method:	N/A	Prep Batch:	PB07708	Date Prepared:	2/7/01

Param	Flag	Result	Units	Dilution	RDL
Total Organic Carbon		4.97	mg/L	1	1

Sample: 164117 - 0143-HMW36-0101

Analysis:	TOC	Analytical Method:	S 415.1	QC Batch:	QC08944	Date Analyzed:	2/7/01
Analyst:	RC	Preparation Method:	N/A	Prep Batch:	PB07708	Date Prepared:	2/7/01

Param	Flag	Result	Units	Dilution	RDL
Total Organic Carbon		8.85	mg/L	1	1

Sample: 164119 - 0143-HMW39-0101-QC

Analysis:	TOC	Analytical Method:	S 415.1	QC Batch:	QC08944	Date Analyzed:	2/7/01
Analyst:	RC	Preparation Method:	N/A	Prep Batch:	PB07708	Date Prepared:	2/7/01

Param	Flag	Result	Units	Dilution	RDL
Total Organic Carbon		5.01	mg/L	1	1

Sample: 164121 - 0143-HMW40-0101

Analysis:	TOC	Analytical Method:	S 415.1	QC Batch:	QC08944	Date Analyzed:	2/7/01
Analyst:	RC	Preparation Method:	N/A	Prep Batch:	PB07708	Date Prepared:	2/7/01

Param	Flag	Result	Units	Dilution	RDL
Total Organic Carbon		5.33	mg/L	1	1

Sample: 164123 - 0143-HMW41-0101

Analysis:	TOC	Analytical Method:	S 415.1	QC Batch:	QC08944	Date Analyzed:	2/7/01
Analyst:	RC	Preparation Method:	N/A	Prep Batch:	PB07708	Date Prepared:	2/7/01

Param	Flag	Result	Units	Dilution	RDL
Total Organic Carbon		2.73	mg/L	1	1

Quality Control Report
Method Blank

Method Blank QCBatch: QC08943

Param	Flag	Results	Units	Reporting Limit
Total Organic Carbon		<1	mg/L	1

Method Blank QCBatch: QC08944

Param	Flag	Results	Units	Reporting Limit
Total Organic Carbon		<1	mg/L	1

Quality Control Report
Lab Control Spikes and Duplicate Spikes

LCS QC Batch: QC08943

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Organic Carbon		5.61	mg/L	1	5	<1	112		85 - 118	20

LCSD QC Batch: QC08943

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Organic Carbon		5.53	mg/L	1	5	<1	110	1	85 - 118	20

LCS QC Batch: QC08944

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Organic Carbon		5.56	mg/L	1	5	<1	111		85 - 118	20

LCSD QC Batch: QC08944

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Organic Carbon	[1]	6.4	mg/L	1	5	<1	128	14	85 - 118	20

Quality Control Report
Matrix Spikes and Duplicate Spikes

MS QC Batch: QC08943

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Organic Carbon	[2]	30.41	mg/L	1	5	48.3	-357		85 - 118	20

MSD QC Batch: QC08943

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Organic Carbon	[3]	26.38	mg/L	1	5	48.3	-438	-20	85 - 118	20

MS QC Batch: QC08944

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Organic Carbon		13.71	mg/L	1	5	8.85	97		85 - 118	20

MSD QC Batch: QC08944

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Organic Carbon		13.9	mg/L	1	5	8.85	101	4	85 - 118	20

Quality Control Report
Continuing Calibration Verification Standards

[1]Recovery for LCSD out of range due to contamination. MS/MSD shows process under control.
[2]MS/MSD out of control due to matrix interference's. LCS/LCSD show process is in control.
[3]MS/MSD out of control due to matrix interference's. LCS/LCSD show process is in control.

CCV (1) QC Batch: QC08943

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5	5.52	110	85 - 115	2/7/01

CCV (2) QC Batch: QC08943

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5	5.58	111	85 - 115	2/7/01

ICV (1) QC Batch: QC08943

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5	4.4	88	85 - 115	2/7/01

CCV (1) QC Batch: QC08944

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5	5.33	106	85 - 115	2/7/01

CCV (2) QC Batch: QC08944

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5	5.2	104	85 - 115	2/7/01

ICV (1) QC Batch: QC08944

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Organic Carbon		mg/L	5	4.31	86	85 - 115	2/7/01

DRO Results and Quality Control

TRACEANALYSIS, INC.

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E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Karen Costa
Mevatec
P.O. Box 399 Bldg. 126
WSMR, NM 88002

Report Date: March 6, 2001

Order ID Number: A01013023

Project Number: 700 A21
Project Name: Groundwater Sampling HELSTF Chrome Site
Project Location: N/A

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
163945	0143-HMW13-0101-QC	Water	1/29/01	12:35	1/30/01
163947	0143-HMW11-0101	Water	1/29/01	10:29	1/30/01
163949	0143-HMW43-0101	Water	1/29/01	14:02	1/30/01
163951	0143-HMW13-0101	Water	1/29/01	12:35	1/30/01
164014	0143-HMW38-0101	Water	1/30/01	11:28	1/31/01
164016	0143-HMW37-0101	Water	1/30/01	12:00	1/31/01
164115	0143-HMW39-0101	Water	1/31/01	11:57	1/31/01
164117	0143-HMW36-0101	Water	1/31/01	11:10	1/31/01
164119	0143-HMW39-0101-QC	Water	1/31/01	11:57	1/31/01
164121	0143-HMW40-0101	Water	1/31/01	13:12	1/31/01
164123	0143-HMW41-0101	Water	1/31/01	12:20	1/31/01

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 6 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael T. Abel
Dr. Blair Leftwich, Director

Analytical Report

Sample: 163945 - 0143-HMW13-0101-QC

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC08918	Date Analyzed:	2/8/01
Analyst:	BP	Preparation Method:	3510C - Mod.	Prep Batch:	PB07686	Date Prepared:	2/8/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<5	mg/L	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		25	mg/L	1	25	100	70 - 130

Sample: 163947 - 0143-HMW11-0101

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC08918	Date Analyzed:	2/8/01
Analyst:	BP	Preparation Method:	3510C - Mod.	Prep Batch:	PB07686	Date Prepared:	2/8/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<5	mg/L	0.10	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		25	mg/L	0.10	25	100	70 - 130

Sample: 163949 - 0143-HMW43-0101

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC08918	Date Analyzed:	2/8/01
Analyst:	BP	Preparation Method:	3510C - Mod.	Prep Batch:	PB07686	Date Prepared:	2/8/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<5	mg/L	0.10	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		21	mg/L	0.10	25	84	70 - 130

Sample: 163951 - 0143-HMW13-0101

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC08918	Date Analyzed:	2/8/01
Analyst:	BP	Preparation Method:	3510C - Mod.	Prep Batch:	PB07686	Date Prepared:	2/8/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<5	mg/L	0.10	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		26	mg/L	0.10	25	104	70 - 130

Sample: 164014 - 0143-HMW38-0101

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC08918	Date Analyzed:	2/8/01
Analyst:	BP	Preparation Method:	3510C - Mod.	Prep Batch:	PB07686	Date Prepared:	2/8/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<5	mg/L	0.10	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		26	mg/L	0.10	25	104	70 - 130

Sample: 164016 - 0143-HMW37-0101

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC08918	Date Analyzed:	2/8/01
Analyst:	BP	Preparation Method:	3510C - Mod.	Prep Batch:	PB07686	Date Prepared:	2/8/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<5	mg/L	0.10	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		25	mg/L	0.10	25	100	70 - 130

Sample: 164115 - 0143-HMW39-0101

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC08918	Date Analyzed:	2/8/01
Analyst:	BP	Preparation Method:	3510C - Mod.	Prep Batch:	PB07686	Date Prepared:	2/8/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<5	mg/L	0.10	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		24	mg/L	0.10	25	96	70 - 130

Sample: 164117 - 0143-HMW36-0101

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC08918	Date Analyzed:	2/8/01
Analyst:	BP	Preparation Method:	3510C - Mod.	Prep Batch:	PB07686	Date Prepared:	2/8/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<5	mg/L	0.10	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		24	mg/L	0.10	25	96	70 - 130

Sample: 164119 - 0143-HMW39-0101-QC

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC08918	Date Analyzed:	2/8/01
Analyst:	BP	Preparation Method:	3510C - Mod.	Prep Batch:	PB07686	Date Prepared:	2/8/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<5	mg/L	0.10	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		22	mg/L	0.10	25	88	70 - 130

Sample: 164121 - 0143-HMW40-0101

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC08918	Date Analyzed:	2/8/01
Analyst:	BP	Preparation Method:	3510C - Mod.	Prep Batch:	PB07686	Date Prepared:	2/8/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<5	mg/L	0.10	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		23	mg/L	0.10	25	92	70 - 130

Sample: 164123 - 0143-HMW41-0101

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC08918	Date Analyzed:	2/8/01
Analyst:	BP	Preparation Method:	3510C - Mod.	Prep Batch:	PB07686	Date Prepared:	2/8/01

Param	Flag	Result	Units	Dilution	RDL
DRO		<5	mg/L	0.10	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Octane		22	mg/L	0.10	25	88	70 - 130

Quality Control Report
Method Blank

Method Blank

QCBatch: QC08918

Param	Flag	Results	Units	Reporting Limit
DRO		<5	mg/L	50

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
n-Octane		24	mg/L	25	94	70 - 130

Quality Control Report
Lab Control Spikes and Duplicate Spikes

LCS

QC Batch: QC08918

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
DRO		25	mg/L	0.10	25	<5	100		70 - 130	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
n-Octane		25	mg/L	1	25	100	70 - 130

LCSD

QC Batch: QC08918

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
DRO		23	mg/L	0.10	25	<5	92	8	70 - 130	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
n-Octane		21	mg/L	1	25	84	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QC Batch: QC08918

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	222	88	85 - 115	2/8/01
n-Octane		mg/L	250	240	96	85 - 115	2/8/01

CCV (2)

QC Batch: QC08918

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO	[1]	mg/L	250	210	84	85 - 115	2/8/01
n-Octane	[2]	mg/L	250	211	84	85 - 115	2/8/01

CCV (3)

QC Batch: QC08918

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	252	100	85 - 115	2/8/01
n-Octane		mg/L	250	227	90	85 - 115	2/8/01

ICV (1)

QC Batch: QC08918

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/L	250	252	100	85 - 115	2/8/01
n-Octane		mg/L	250	233	93	85 - 115	2/8/01

[1] CCV out of standard range. Samples did not contain analytes of interest.
[2] CCV out of standard range. Samples did not contain analytes of interest.

GRO Results and Quality Control

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Karen Costa
Mevatec
P.O. Box 399 Bldg. 126
WSMR, NM 88002

Report Date: March 6, 2001

Order ID Number: A01013023

Project Number: 700 A21
Project Name: Groundwater Sampling HELSTF Chrome Site
Project Location: N/A

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
163945	0143-HMW13-0101-QC	Water	1/29/01	12:35	1/30/01
163947	0143-HMW11-0101	Water	1/29/01	10:29	1/30/01
163949	0143-HMW43-0101	Water	1/29/01	14:02	1/30/01
163951	0143-HMW13-0101	Water	1/29/01	12:35	1/30/01
164014	0143-HMW38-0101	Water	1/30/01	11:28	1/31/01
164016	0143-HMW37-0101	Water	1/30/01	12:00	1/31/01
164115	0143-HMW39-0101	Water	1/31/01	11:57	1/31/01
164117	0143-HMW36-0101	Water	1/31/01	11:10	1/31/01
164119	0143-HMW39-0101-QC	Water	1/31/01	11:57	1/31/01
164121	0143-HMW40-0101	Water	1/31/01	13:12	1/31/01
164123	0143-HMW41-0101	Water	1/31/01	12:20	1/31/01

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

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Dr. Blair Leftwich, Director

Analytical Report

Sample: 163945 - 0143-HMW13-0101-QC

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC08746	Date Analyzed:	1/31/01
Analyst:	JW	Preparation Method:	5030	Prep Batch:	PB07555	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<0.1	mg/L	1	0.10

Sample: 163947 - 0143-HMW11-0101

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC08746	Date Analyzed:	1/31/01
Analyst:	JW	Preparation Method:	5030	Prep Batch:	PB07555	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<0.1	mg/L	1	0.10

Sample: 163949 - 0143-HMW43-0101

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC08746	Date Analyzed:	1/31/01
Analyst:	JW	Preparation Method:	5030	Prep Batch:	PB07555	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<0.5	mg/L	5	0.10

Sample: 163951 - 0143-HMW13-0101

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC08746	Date Analyzed:	1/31/01
Analyst:	JW	Preparation Method:	5030	Prep Batch:	PB07555	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<0.5	mg/L	5	0.10

Sample: 164014 - 0143-HMW38-0101

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC08749	Date Analyzed:	2/1/01
Analyst:	JW	Preparation Method:	5030	Prep Batch:	PB07557	Date Prepared:	2/1/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<0.1	mg/L	1	0.10

Sample: 164016 - 0143-HMW37-0101

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC08749	Date Analyzed:	2/1/01
Analyst:	JW	Preparation Method:	5030	Prep Batch:	PB07557	Date Prepared:	2/1/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<0.5	mg/L	5	0.10

Sample: 164115 - 0143-HMW39-0101

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC08756	Date Analyzed:	2/4/01
Analyst:	JW	Preparation Method:	5030	Prep Batch:	PB07567	Date Prepared:	2/4/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<0.100	mg/L	1	0.10

Sample: 164117 - 0143-HMW36-0101

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC08756	Date Analyzed:	2/4/01
Analyst:	JW	Preparation Method:	5030	Prep Batch:	PB07567	Date Prepared:	2/4/01

Param	Flag	Result	Units	Dilution	RDL
GRO		0.844	mg/L	1	0.10

Sample: 164119 - 0143-HMW39-0101-QC

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC08756	Date Analyzed:	2/4/01
Analyst:	JW	Preparation Method:	5030	Prep Batch:	PB07567	Date Prepared:	2/4/01

Param	Flag	Result	Units	Dilution	RDL
GRO		<0.100	mg/L	1	0.10

Sample: 164121 - 0143-HMW40-0101

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC08756	Date Analyzed:	2/4/01
Analyst:	JW	Preparation Method:	5030	Prep Batch:	PB07567	Date Prepared:	2/4/01

Param	Flag	Result	Units	Dilution	RDL
GRO		0.495	mg/L	1	0.10

Sample: 164123 - 0143-HMW41-0101

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC08756	Date Analyzed:	2/4/01
Analyst:	JW	Preparation Method:	5030	Prep Batch:	PB07567	Date Prepared:	2/4/01

Param	Flag	Result	Units	Dilution	RDL
GRO		0.687	mg/L	5	0.10

Quality Control Report
Method Blank

Method Blank QCBatch: QC08746

Param	Flag	Results	Units	Reporting Limit
GRO		<0.1	mg/L	0.10

Method Blank QCBatch: QC08749

Param	Flag	Results	Units	Reporting Limit
GRO		<0.1	mg/L	0.10

Method Blank QCBatch: QC08756

Param	Flag	Results	Units	Reporting Limit
GRO		<0.1	mg/L	0.10

Quality Control Report
Lab Control Spikes and Duplicate Spikes

LCS QC Batch: QC08746

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
GRO		1.01	mg/L	1	1	<0.1	101		70 - 130	20

LCSD QC Batch: QC08746

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
GRO		1	mg/L	1	1	<0.1	100	1	70 - 130	20

LCS QC Batch: QC08749

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
GRO		1.022	mg/L	1	1	<0.1	102		70 - 130	20

LCSD QC Batch: QC08749

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
GRO		1.05	mg/L	1	1	<0.1	105	3	70 - 130	20

LCS QC Batch: QC08756

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
GRO		1.01	mg/L	1	1	<0.1	101		70 - 130	20

LCSD QC Batch: QC08756

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
GRO		0.982	mg/L	1	1	<0.1	98	3	70 - 130	20

Quality Control Report
Continuing Calibration Verification Standards

CCV (1) QC Batch: QC08746

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1	1.14	114	85 - 115	1/31/01

ICV (1) QC Batch: QC08746

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1	0.852	85	85 - 115	1/31/01

CCV (1)

QC Batch: QC08749

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1	1.023	102	85 - 115	2/1/01

ICV (1)

QC Batch: QC08749

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1	0.905	90	85 - 115	2/1/01

CCV (1)

QC Batch: QC08756

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1	0.935	93	85 - 115	2/4/01

ICV (1)

QC Batch: QC08756

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1	1.01	101	85 - 115	2/4/01

TDS Results and Quality Control

TRACEANALYSIS, INC.

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E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Karen Costa
Mevatec
P.O. Box 399 Bldg. 126
WSMR, NM 88002

Report Date: March 5, 2001

Order ID Number: A01013023

Project Number: 700 A21
Project Name: Groundwater Sampling HELSTF Chrome Site
Project Location: N/A

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
163945	0143-HMW13-0101-QC	Water	1/29/01	12:35	1/30/01
163947	0143-HMW11-0101	Water	1/29/01	10:29	1/30/01
163949	0143-HMW43-0101	Water	1/29/01	14:02	1/30/01
163951	0143-HMW13-0101	Water	1/29/01	12:35	1/30/01
164014	0143-HMW38-0101	Water	1/30/01	11:28	1/31/01
164016	0143-HMW37-0101	Water	1/30/01	12:00	1/31/01
164115	0143-HMW39-0101	Water	1/31/01	11:57	1/31/01
164117	0143-HMW36-0101	Water	1/31/01	11:10	1/31/01
164119	0143-HMW39-0101-QC	Water	1/31/01	11:57	1/31/01
164121	0143-HMW40-0101	Water	1/31/01	13:12	1/31/01
164123	0143-HMW41-0101	Water	1/31/01	12:20	1/31/01

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This report consists of a total of 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael T. Abel
Dr. Blair Leftwich, Director

Analytical Report

Sample: 163945 - 0143-HMW13-0101-QC

Analysis:	TDS	Analytical Method:	SM 2540C	QC Batch:	QC09191	Date Analyzed:	1/31/01
Analyst:	AM	Preparation Method:	N/A	Prep Batch:	PB07911	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		6500	mg/L	1	50

Sample: 163947 - 0143-HMW11-0101

Analysis:	TDS	Analytical Method:	SM 2540C	QC Batch:	QC09191	Date Analyzed:	1/31/01
Analyst:	AM	Preparation Method:	N/A	Prep Batch:	PB07911	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		18000	mg/L	1	50

Sample: 163949 - 0143-HMW43-0101

Analysis:	TDS	Analytical Method:	SM 2540C	QC Batch:	QC09191	Date Analyzed:	1/31/01
Analyst:	AM	Preparation Method:	N/A	Prep Batch:	PB07911	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		9100	mg/L	1	50

Sample: 163951 - 0143-HMW13-0101

Analysis:	TDS	Analytical Method:	SM 2540C	QC Batch:	QC09191	Date Analyzed:	1/31/01
Analyst:	AM	Preparation Method:	N/A	Prep Batch:	PB07911	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		6200	mg/L	1	50

Sample: 164014 - 0143-HMW38-0101

Analysis:	TDS	Analytical Method:	SM 2540C	QC Batch:	QC09191	Date Analyzed:	1/31/01
Analyst:	AM	Preparation Method:	N/A	Prep Batch:	PB07911	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		16000	mg/L	1	50

Sample: 164016 - 0143-HMW37-0101

Analysis:	TDS	Analytical Method:	SM 2540C	QC Batch:	QC09191	Date Analyzed:	1/31/01
Analyst:	AM	Preparation Method:	N/A	Prep Batch:	PB07911	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		6400	mg/L	1	50

Sample: 164115 - 0143-HMW39-0101

Analysis:	TDS	Analytical Method:	SM 2540C	QC Batch:	QC09192	Date Analyzed:	1/31/01
Analyst:	AM	Preparation Method:	N/A	Prep Batch:	PB07912	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		22000	mg/L	1	50

Sample: 164117 - 0143-HMW36-0101

Analysis:	TDS	Analytical Method:	SM 2540C	QC Batch:	QC09192	Date Analyzed:	1/31/01
Analyst:	AM	Preparation Method:	N/A	Prep Batch:	PB07912	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		9500	mg/L	1	50

Sample: 164119 - 0143-HMW39-0101-QC

Analysis:	TDS	Analytical Method:	SM 2540C	QC Batch:	QC09191	Date Analyzed:	1/31/01
Analyst:	AM	Preparation Method:	N/A	Prep Batch:	PB07911	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		22000	mg/L	1	50

Sample: 164121 - 0143-HMW40-0101

Analysis:	TDS	Analytical Method:	SM 2540C	QC Batch:	QC09191	Date Analyzed:	1/31/01
Analyst:	AM	Preparation Method:	N/A	Prep Batch:	PB07911	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		42000	mg/L	1	50

Sample: 164123 - 0143-HMW41-0101

Analysis:	TDS	Analytical Method:	SM 2540C	QC Batch:	QC09191	Date Analyzed:	1/31/01
Analyst:	AM	Preparation Method:	N/A	Prep Batch:	PB07911	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		23000	mg/L	1	50

Quality Control Report
Method Blank

Method Blank QCBatch: QC09191

Param	Flag	Results	Units	Reporting Limit
Total Dissolved Solids		<50	mg/L	50

Method Blank QCBatch: QC09192

Param	Flag	Results	Units	Reporting Limit
Total Dissolved Solids		<50	mg/L	50

Quality Control Report
Duplicate Samples

Duplicate QC Batch: QC09191

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		16000	16000	mg/L	1	0	20

Duplicate QC Batch: QC09192

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		22000	22000	mg/L	1	0	20

Quality Control Report
Continuing Calibration Verification Standards

ICV (1) QC Batch: QC09191

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	984	98	80 - 120	1/31/01

ICV (1) QC Batch: QC09192

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	984	98	80 - 120	1/31/01

pH Results and Quality Control

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Karen Costa
Mevatec
P.O. Box 399 Bldg. 126
WSMR, NM 88002

Report Date: March 6, 2001

Order ID Number: A01013023

Project Number: 700 A21
Project Name: Groundwater Sampling HELSTF Chrome Site
Project Location: N/A

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
163945	0143-HMW13-0101-QC	Water	1/29/01	12:35	1/30/01
163947	0143-HMW11-0101	Water	1/29/01	10:29	1/30/01
163949	0143-HMW43-0101	Water	1/29/01	14:02	1/30/01
163951	0143-HMW13-0101	Water	1/29/01	12:35	1/30/01
164014	0143-HMW38-0101	Water	1/30/01	11:28	1/31/01
164016	0143-HMW37-0101	Water	1/30/01	12:00	1/31/01
164115	0143-HMW39-0101	Water	1/31/01	11:57	1/31/01
164117	0143-HMW36-0101	Water	1/31/01	11:10	1/31/01
164119	0143-HMW39-0101-QC	Water	1/31/01	11:57	1/31/01
164121	0143-HMW40-0101	Water	1/31/01	13:12	1/31/01
164123	0143-HMW41-0101	Water	1/31/01	12:20	1/31/01

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

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Michael T. Abel
Dr. Blair Leftwich, Director

Analytical Report

Sample: 163945 - 0143-HMW13-0101-QC

Analysis:	pH	Analytical Method:	SM 4500-H+	QC Batch:	QC09069	Date Analyzed:	1/30/01
Analyst:	LG	Preparation Method:	N/A	Prep Batch:	PB07809	Date Prepared:	1/30/01

Param	Flag	Result	Units	Dilution	RDL
pH		7.78	s.u.	1	1

Sample: 163947 - 0143-HMW11-0101

Analysis:	pH	Analytical Method:	SM 4500-H+	QC Batch:	QC09069	Date Analyzed:	1/30/01
Analyst:	LG	Preparation Method:	N/A	Prep Batch:	PB07809	Date Prepared:	1/30/01

Param	Flag	Result	Units	Dilution	RDL
pH		7.59	s.u.	1	1

Sample: 163949 - 0143-HMW43-0101

Analysis:	pH	Analytical Method:	SM 4500-H+	QC Batch:	QC09069	Date Analyzed:	1/30/01
Analyst:	LG	Preparation Method:	N/A	Prep Batch:	PB07809	Date Prepared:	1/30/01

Param	Flag	Result	Units	Dilution	RDL
pH		7.67	s.u.	1	1

Sample: 163951 - 0143-HMW13-0101

Analysis:	pH	Analytical Method:	SM 4500-H+	QC Batch:	QC09069	Date Analyzed:	1/30/01
Analyst:	LG	Preparation Method:	N/A	Prep Batch:	PB07809	Date Prepared:	1/30/01

Param	Flag	Result	Units	Dilution	RDL
pH		7.74	s.u.	1	1

Sample: 164014 - 0143-HMW38-0101

Analysis:	pH	Analytical Method:	SM 4500-H+	QC Batch:	QC09070	Date Analyzed:	1/31/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07810	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
pH		7.74	s.u.	1	1

Sample: 164016 - 0143-HMW37-0101

Analysis:	pH	Analytical Method:	SM 4500-H+	QC Batch:	QC09070	Date Analyzed:	1/31/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07810	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
pH		7.71	s.u.	1	1

Sample: 164115 - 0143-HMW39-0101

Analysis:	pH	Analytical Method:	SM 4500-H+	QC Batch:	QC09070	Date Analyzed:	1/31/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07810	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
pH		7.53	s.u.	1	1

Sample: 164117 - 0143-HMW36-0101

Analysis:	pH	Analytical Method:	SM 4500-H+	QC Batch:	QC09070	Date Analyzed:	1/31/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07810	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
pH		7.46	s.u.	1	1

Sample: 164119 - 0143-HMW39-0101-QC

Analysis:	pH	Analytical Method:	SM 4500-H+	QC Batch:	QC09070	Date Analyzed:	1/31/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07810	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
pH		7.53	s.u.	1	1

Sample: 164121 - 0143-HMW40-0101

Analysis:	pH	Analytical Method:	SM 4500-H+	QC Batch:	QC09070	Date Analyzed:	1/31/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07810	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
pH		7.69	s.u.	1	1

Sample: 164123 - 0143-HMW41-0101

Analysis:	pH	Analytical Method:	SM 4500-H+	QC Batch:	QC09070	Date Analyzed:	1/31/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07810	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
pH		7.46	s.u.	1	1

Quality Control Report
Duplicate Samples

Duplicate QC Batch: QC09069

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH		7.28	7.23	s.u.	1	1	20

Duplicate QC Batch: QC09070

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH		7.72	7.71	s.u.	1	0	20

Quality Control Report
Continuing Calibration Verification Standards

CCV (1) QC Batch: QC09069

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	8	7.93	99	-0.1 s.u. - +0.1 s.u.	1/30/01

ICV (1) QC Batch: QC09069

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	8	7.97	99	-0.1 s.u. - +0.1 s.u.	1/30/01

CCV (1) QC Batch: QC09070

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	8	7.98	99	-0.1 s.u. - +0.1 s.u.	1/31/01

ICV (1) QC Batch: QC09070

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	8	7.92	99	-0.1 s.u. - +0.1 s.u.	1/31/01

Specific Conductance Results and Quality Control

TRACEANALYSIS, INC.

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E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Karen Costa
Mevatec
P.O. Box 399 Bldg. 126
WSMR, NM 88002

Report Date: March 6, 2001

Order ID Number: A01013023

Project Number: 700 A21
Project Name: Groundwater Sampling HELSTF Chrome Site
Project Location: N/A

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
163945	0143-HMW13-0101-QC	Water	1/29/01	12:35	1/30/01
163947	0143-HMW11-0101	Water	1/29/01	10:29	1/30/01
163949	0143-HMW43-0101	Water	1/29/01	14:02	1/30/01
163951	0143-HMW13-0101	Water	1/29/01	12:35	1/30/01
164014	0143-HMW38-0101	Water	1/30/01	11:28	1/31/01
164016	0143-HMW37-0101	Water	1/30/01	12:00	1/31/01
164115	0143-HMW39-0101	Water	1/31/01	11:57	1/31/01
164117	0143-HMW36-0101	Water	1/31/01	11:10	1/31/01
164119	0143-HMW39-0101-QC	Water	1/31/01	11:57	1/31/01
164121	0143-HMW40-0101	Water	1/31/01	13:12	1/31/01
164123	0143-HMW41-0101	Water	1/31/01	12:20	1/31/01

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Michael T. Ard
Dr. Blair Leftwich, Director

Analytical Report

Sample: 163945 - 0143-HMW13-0101-QC

Analysis:	Conductivity	Analytical Method:	SM 2510B	QC Batch:	QC08908	Date Analyzed:	1/31/01
Analyst:	AM	Preparation Method:	N/A	Prep Batch:	PB07675	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		6400	μMHOS/cm	1	

Sample: 163947 - 0143-HMW11-0101

Analysis:	Conductivity	Analytical Method:	SM 2510B	QC Batch:	QC08908	Date Analyzed:	1/31/01
Analyst:	AM	Preparation Method:	N/A	Prep Batch:	PB07675	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		19000	μMHOS/cm	1	

Sample: 163949 - 0143-HMW43-0101

Analysis:	Conductivity	Analytical Method:	SM 2510B	QC Batch:	QC08908	Date Analyzed:	1/31/01
Analyst:	AM	Preparation Method:	N/A	Prep Batch:	PB07675	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		8900	μMHOS/cm	1	

Sample: 163951 - 0143-HMW13-0101

Analysis:	Conductivity	Analytical Method:	SM 2510B	QC Batch:	QC08908	Date Analyzed:	1/31/01
Analyst:	AM	Preparation Method:	N/A	Prep Batch:	PB07675	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		6300	μMHOS/cm	1	

Sample: 164014 - 0143-HMW38-0101

Analysis:	Conductivity	Analytical Method:	SM 2510B	QC Batch:	QC08908	Date Analyzed:	1/31/01
Analyst:	AM	Preparation Method:	N/A	Prep Batch:	PB07675	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		16000	μMHOS/cm	1	

Sample: 164016 - 0143-HMW37-0101

Analysis:	Conductivity	Analytical Method:	SM 2510B	QC Batch:	QC08908	Date Analyzed:	1/31/01
Analyst:	AM	Preparation Method:	N/A	Prep Batch:	PB07675	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		6400	μMHOS/cm	1	

Sample: 164115 - 0143-HMW39-0101

Analysis:	Conductivity	Analytical Method:	SM 2510B	QC Batch:	QC08908	Date Analyzed:	1/31/01
Analyst:	AM	Preparation Method:	N/A	Prep Batch:	PB07675	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		23000	μMHOS/cm	1	

Sample: 164117 - 0143-HMW36-0101

Analysis:	Conductivity	Analytical Method:	SM 2510B	QC Batch:	QC08908	Date Analyzed:	1/31/01
Analyst:	AM	Preparation Method:	N/A	Prep Batch:	PB07675	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		9700	μMHOS/cm	1	

Sample: 164119 - 0143-HMW39-0101-QC

Analysis:	Conductivity	Analytical Method:	SM 2510B	QC Batch:	QC08908	Date Analyzed:	1/31/01
Analyst:	AM	Preparation Method:	N/A	Prep Batch:	PB07675	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		12300	μMHOS/cm	1	

Sample: 164121 - 0143-HMW40-0101

Analysis:	Conductivity	Analytical Method:	SM 2510B	QC Batch:	QC08908	Date Analyzed:	1/31/01
Analyst:	AM	Preparation Method:	N/A	Prep Batch:	PB07675	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		42000	μMHOS/cm	1	

Sample: 164123 - 0143-HMW41-0101

Analysis:	Conductivity	Analytical Method:	SM 2510B	QC Batch:	QC08908	Date Analyzed:	1/31/01
Analyst:	AM	Preparation Method:	N/A	Prep Batch:	PB07675	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		24000	μMHOS/cm	1	

Quality Control Report
Method Blank

Method Blank

QCBatch: QC08908

Param	Flag	Results	Units	Reporting Limit
Specific Conductance		<1.0	μMHOS/cm	

Quality Control Report
Duplicate Samples

Duplicate

QC Batch: QC08908

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance		9300	9100	μMHOS/cm	1	2	20

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QC Batch: QC08908

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1413	1340	94	80 - 120	1/31/01

ICV (1)

QC Batch: QC08908

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1413	1360	96	80 - 120	1/31/01

Alkalinity Results and Quality Control

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Karen Costa
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P.O. Box 399 Bldg. 126
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Report Date: March 6, 2001

Order ID Number: A01013023

Project Number: 700 A21
Project Name: Groundwater Sampling HELSTF Chrome Site
Project Location: N/A

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
163945	0143-HMW13-0101-QC	Water	1/29/01	12:35	1/30/01
163947	0143-HMW11-0101	Water	1/29/01	10:29	1/30/01
163949	0143-HMW43-0101	Water	1/29/01	14:02	1/30/01
163951	0143-HMW13-0101	Water	1/29/01	12:35	1/30/01
164014	0143-HMW38-0101	Water	1/30/01	11:28	1/31/01
164016	0143-HMW37-0101	Water	1/30/01	12:00	1/31/01
164115	0143-HMW39-0101	Water	1/31/01	11:57	1/31/01
164117	0143-HMW36-0101	Water	1/31/01	11:10	1/31/01
164119	0143-HMW39-0101-QC	Water	1/31/01	11:57	1/31/01
164121	0143-HMW40-0101	Water	1/31/01	13:12	1/31/01
164123	0143-HMW41-0101	Water	1/31/01	12:20	1/31/01

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

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Michael T. Arel
Dr. Blair Leftwich, Director

Analytical Report

Sample: 163945 - 0143-HMW13-0101-QC

Analysis:	Alkalinity	Analytical Method:	SM 2320B	QC Batch:	QC09090	Date Analyzed:	2/5/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07825	Date Prepared:	2/5/01

Param	Flag	Result	Units	Dilution	RDL
Carbonate Alkalinity		<5.0	mg/L as CaCo3	1	5
Bicarbonate Alkalinity		120	mg/L as CaCo3	1	5
Total Alkalinity		120	mg/L as CaCo3	1	5

Sample: 163947 - 0143-HMW11-0101

Analysis:	Alkalinity	Analytical Method:	SM 2320B	QC Batch:	QC09090	Date Analyzed:	2/5/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07825	Date Prepared:	2/5/01

Param	Flag	Result	Units	Dilution	RDL
Carbonate Alkalinity		<5.0	mg/L as CaCo3	1	5
Bicarbonate Alkalinity		100	mg/L as CaCo3	1	5
Total Alkalinity		100	mg/L as CaCo3	1	5

Sample: 163949 - 0143-HMW43-0101

Analysis:	Alkalinity	Analytical Method:	SM 2320B	QC Batch:	QC09090	Date Analyzed:	2/5/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07825	Date Prepared:	2/5/01

Param	Flag	Result	Units	Dilution	RDL
Carbonate Alkalinity		<5.0	mg/L as CaCo3	1	5
Bicarbonate Alkalinity		190	mg/L as CaCo3	1	5
Total Alkalinity		190	mg/L as CaCo3	1	5

Sample: 163951 - 0143-HMW13-0101

Analysis:	Alkalinity	Analytical Method:	SM 2320B	QC Batch:	QC09090	Date Analyzed:	2/5/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07825	Date Prepared:	2/5/01

Param	Flag	Result	Units	Dilution	RDL
Carbonate Alkalinity		<5.0	mg/L as CaCo3	1	5
Bicarbonate Alkalinity		120	mg/L as CaCo3	1	5
Total Alkalinity		120	mg/L as CaCo3	1	5

Sample: 164014 - 0143-HMW38-0101

Analysis:	Alkalinity	Analytical Method:	SM 2320B	QC Batch:	QC09090	Date Analyzed:	2/5/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07825	Date Prepared:	2/5/01

Param	Flag	Result	Units	Dilution	RDL
Carbonate Alkalinity		<5.0	mg/L as CaCo3	1	5
Bicarbonate Alkalinity		160	mg/L as CaCo3	1	5
Total Alkalinity		160	mg/L as CaCo3	1	5

Sample: 164016 - 0143-HMW37-0101

Analysis:	Alkalinity	Analytical Method:	SM 2320B	QC Batch:	QC09090	Date Analyzed:	2/5/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07825	Date Prepared:	2/5/01

Param	Flag	Result	Units	Dilution	RDL
Carbonate Alkalinity		<5.0	mg/L as CaCo3	1	5
Bicarbonate Alkalinity		130	mg/L as CaCo3	1	5
Total Alkalinity		130	mg/L as CaCo3	1	5

Sample: 164115 - 0143-HMW39-0101

Analysis:	Alkalinity	Analytical Method:	SM 2320B	QC Batch:	QC09091	Date Analyzed:	2/5/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07826	Date Prepared:	2/5/01

Param	Flag	Result	Units	Dilution	RDL
Carbonate Alkalinity		<5.0	mg/L as CaCo3	1	5
Bicarbonate Alkalinity		200	mg/L as CaCo3	1	5
Total Alkalinity		200	mg/L as CaCo3	1	5

Sample: 164117 - 0143-HMW36-0101

Analysis:	Alkalinity	Analytical Method:	SM 2320B	QC Batch:	QC09091	Date Analyzed:	2/5/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07826	Date Prepared:	2/5/01

Param	Flag	Result	Units	Dilution	RDL
Carbonate Alkalinity		<5.0	mg/L as CaCo3	1	5
Bicarbonate Alkalinity		710	mg/L as CaCo3	1	5
Total Alkalinity		710	mg/L as CaCo3	1	5

Sample: 164119 - 0143-HMW39-0101-QC

Analysis:	Alkalinity	Analytical Method:	SM 2320B	QC Batch:	QC09091	Date Analyzed:	2/5/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07826	Date Prepared:	2/5/01

Param	Flag	Result	Units	Dilution	RDL
Carbonate Alkalinity		<5.0	mg/L as CaCo3	1	5
Bicarbonate Alkalinity		720	mg/L as CaCo3	1	5
Total Alkalinity		720	mg/L as CaCo3	1	5

Sample: 164121 - 0143-HMW40-0101

Analysis:	Alkalinity	Analytical Method:	SM 2320B	QC Batch:	QC09091	Date Analyzed:	2/5/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07826	Date Prepared:	2/5/01

Param	Flag	Result	Units	Dilution	RDL
Carbonate Alkalinity		<5.0	mg/L as CaCo3	1	5
Bicarbonate Alkalinity		130	mg/L as CaCo3	1	5
Total Alkalinity		130	mg/L as CaCo3	1	5

Sample: 164123 - 0143-HMW41-0101

Analysis:	Alkalinity	Analytical Method:	SM 2320B	QC Batch:	QC09091	Date Analyzed:	2/5/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07826	Date Prepared:	2/5/01

Param	Flag	Result	Units	Dilution	RDL
Carbonate Alkalinity		<5.0	mg/L as CaCo3	1	5
Bicarbonate Alkalinity		220	mg/L as CaCo3	1	5
Total Alkalinity		220	mg/L as CaCo3	1	5

Quality Control Report
Method Blank

Method Blank QCBatch: QC09090

Param	Flag	Results	Units	Reporting Limit
Carbonate Alkalinity		<5.0	mg/L as CaCo3	5
Bicarbonate Alkalinity		<5.0	mg/L as CaCo3	5
Total Alkalinity		<5.0	mg/L as CaCo3	5

Method Blank QCBatch: QC09091

Param	Flag	Results	Units	Reporting Limit
Carbonate Alkalinity		<5.0	mg/L as CaCo3	5
Bicarbonate Alkalinity		<5.0	mg/L as CaCo3	5
Total Alkalinity		<5.0	mg/L as CaCo3	5

Quality Control Report
Duplicate Samples

Duplicate QC Batch: QC09090

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Carbonate Alkalinity		<5.0	<5.0	mg/L as CaCo3	1	0	20
Bicarbonate Alkalinity		1700	1700	mg/L as CaCo3	1	0	20
Total Alkalinity		1700	1700	mg/L as CaCo3	1	0	20

Duplicate QC Batch: QC09091

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Carbonate Alkalinity		<5.0	<5.0	mg/L as CaCo3	1	0	20
Bicarbonate Alkalinity		200	200	mg/L as CaCo3	1	0	20
Total Alkalinity		200	200	mg/L as CaCo3	1	0	20

Quality Control Report
Continuing Calibration Verification Standards

CCV (1) QC Batch: QC09090

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	100	96.6	96	80 - 120	2/5/01

ICV (1) QC Batch: QC09090

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	100	94.5	94	80 - 120	2/5/01

CCV (1) QC Batch: QC09091

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	100	96.6	96	80 - 120	2/5/01

ICV (1) QC Batch: QC09091

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	100	94.5	94	80 - 120	2/5/01

Total Cyanide Results and Quality Control

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WSMR, NM 88002

Report Date: March 5, 2001

Order ID Number: A01013023

Project Number: 700 A21
Project Name: Groundwater Sampling HELSTF Chrome Site
Project Location: N/A

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164016	0143-HMW37-0101	Water	1/30/01	12:00	1/31/01
164115	0143-HMW39-0101	Water	1/31/01	11:57	1/31/01
164117	0143-HMW36-0101	Water	1/31/01	11:10	1/31/01
164119	0143-HMW39-0101-QC	Water	1/31/01	11:57	1/31/01
164121	0143-HMW40-0101	Water	1/31/01	13:12	1/31/01
164123	0143-HMW41-0101	Water	1/31/01	12:20	1/31/01

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Michael T. Abel
Dr. Blair Leftwich, Director

Analytical Report

Sample: 163945 - 0143-HMW13-0101-QC

Analysis:	Total Cyanide	Analytical Method:	S 9010B	QC Batch:	QC08792	Date Analyzed:	2/5/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07587	Date Prepared:	2/5/01

Param	Flag	Result	Units	Dilution	RDL
Total Cyanide		<0.01	mg/L	1	0.01

Sample: 163947 - 0143-HMW11-0101

Analysis:	Total Cyanide	Analytical Method:	S 9010B	QC Batch:	QC08792	Date Analyzed:	2/5/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07587	Date Prepared:	2/5/01

Param	Flag	Result	Units	Dilution	RDL
Total Cyanide		<0.01	mg/L	1	0.01

Sample: 163949 - 0143-HMW43-0101

Analysis:	Total Cyanide	Analytical Method:	S 9010B	QC Batch:	QC08793	Date Analyzed:	2/5/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07588	Date Prepared:	2/5/01

Param	Flag	Result	Units	Dilution	RDL
Total Cyanide		<0.01	mg/L	1	0.01

Sample: 163951 - 0143-HMW13-0101

Analysis:	Total Cyanide	Analytical Method:	S 9010B	QC Batch:	QC08793	Date Analyzed:	2/5/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07588	Date Prepared:	2/5/01

Param	Flag	Result	Units	Dilution	RDL
Total Cyanide		<0.01	mg/L	1	0.01

Sample: 164014 - 0143-HMW38-0101

Analysis:	Total Cyanide	Analytical Method:	S 9010B	QC Batch:	QC08792	Date Analyzed:	2/5/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07587	Date Prepared:	2/5/01

Param	Flag	Result	Units	Dilution	RDL
Total Cyanide		<0.01	mg/L	1	0.01

Sample: 164016 - 0143-HMW37-0101

Analysis:	Total Cyanide	Analytical Method:	S 9010B	QC Batch:	QC08792	Date Analyzed:	2/5/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07587	Date Prepared:	2/5/01

Param	Flag	Result	Units	Dilution	RDL
Total Cyanide		<0.01	mg/L	1	0.01

Sample: 164115 - 0143-HMW39-0101

Analysis:	Total Cyanide	Analytical Method:	S 9010B	QC Batch:	QC08792	Date Analyzed:	2/5/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07587	Date Prepared:	2/5/01

Param	Flag	Result	Units	Dilution	RDL
Total Cyanide		<0.01	mg/L	1	0.01

Sample: 164117 - 0143-HMW36-0101

Analysis:	Total Cyanide	Analytical Method:	S 9010B	QC Batch:	QC08792	Date Analyzed:	2/5/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07587	Date Prepared:	2/5/01

Param	Flag	Result	Units	Dilution	RDL
Total Cyanide		<0.01	mg/L	1	0.01

Sample: 164119 - 0143-HMW39-0101-QC

Analysis:	Total Cyanide	Analytical Method:	S 9010B	QC Batch:	QC08792	Date Analyzed:	2/5/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07587	Date Prepared:	2/5/01

Param	Flag	Result	Units	Dilution	RDL
Total Cyanide		<0.01	mg/L	1	0.01

Sample: 164121 - 0143-HMW40-0101

Analysis:	Total Cyanide	Analytical Method:	S 9010B	QC Batch:	QC08792	Date Analyzed:	2/5/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07587	Date Prepared:	2/5/01

Param	Flag	Result	Units	Dilution	RDL
Total Cyanide		<0.01	mg/L	1	0.01

Sample: 164123 - 0143-HMW41-0101

Analysis:	Total Cyanide	Analytical Method:	S 9010B	QC Batch:	QC08792	Date Analyzed:	2/5/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07587	Date Prepared:	2/5/01

Param	Flag	Result	Units	Dilution	RDL
Total Cyanide		<0.01	mg/L	1	0.01

Quality Control Report
Method Blank

Method Blank QCBatch: QC08792

Param	Flag	Results	Units	Reporting Limit
Total Cyanide		<0.01	mg/L	0.01

Method Blank QCBatch: QC08793

Param	Flag	Results	Units	Reporting Limit
Total Cyanide		<0.01	mg/L	0.01

Quality Control Report
Lab Control Spikes and Duplicate Spikes

LCS QC Batch: QC08792

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Cyanide		0.109	mg/L	1	0.12	<0.01	90		80 - 120	20

LCSD QC Batch: QC08792

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Cyanide		0.109	mg/L	1	0.12	<0.01	90	0	80 - 120	20

LCS QC Batch: QC08793

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Cyanide		0.109	mg/L	1	0.12	<0.01	90		80 - 120	20

LCSD QC Batch: QC08793

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Cyanide		0.109	mg/L	1	0.12	<0.01	90	0	80 - 120	20

Quality Control Report
Matrix Spikes and Duplicate Spikes

MS QC Batch: QC08792

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Cyanide		0.096	mg/L	1	0.12	<0.01	80		80 - 120	20

MSD QC Batch: QC08792

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Cyanide	[1]	0.087	mg/L	1	0.12	<0.01	72	10	80 - 120	20

MS QC Batch: QC08793

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Cyanide		0.102	mg/L	1	0.12	<0.01	85		80 - 120	20

MSD QC Batch: QC08793

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Cyanide	[2]	0.094	mg/L	1	0.12	<0.01	78	8	80 - 120	20

Quality Control Report
Continuing Calibration Verification Standards

CCV (1) QC Batch: QC08792

[1]MSD out of control limit due to matrix interference's. LCS/LCSD show process under control.
[2]MSD out of control limit due to matrix interference's. LCS/LCSD show process under control.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Cyanide		mg/L	0.12	0.128	106	80 - 120	2/5/01

ICV (1) QC Batch: QC08792

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Cyanide		mg/L	0.12	0.134	111	80 - 120	2/5/01

CCV (1) QC Batch: QC08793

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Cyanide		mg/L	0.12	0.128	106	80 - 120	2/5/01

ICV (1) QC Batch: QC08793

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Cyanide		mg/L	0.12	0.134	111	80 - 120	2/5/01

Dissolved Ion Results and Quality Control

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Analytical and Quality Control Report

Karen Costa
Mevatec
P.O. Box 399 Bldg. 126
WSMR, NM 88002

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Order ID Number: A01013023

Project Number: 700 A21
Project Name: Groundwater Sampling HELSTF Chrome Site
Project Location: N/A

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164117	0143-HMW36-0101	Water	1/31/01	11:10	1/31/01
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Michael T. Abel
Dr. Blair Leftwich, Director

Analytical Report

Sample: 163945 - 0143-HMW13-0101-QC

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC08951 Date Analyzed: 1/30/01
Analyst: DG Preparation Method: N/A Prep Batch: PB07716 Date Prepared: 1/30/01

Param	Flag	Result	Units	Dilution	RDL
Bromide		<10	mg/L	5	2
CL		360	mg/L	5	2
Fluoride		3.9	mg/L	5	0.20
Nitrite-N		<0.5	mg/L	5	0.10
Nitrate-N		20	mg/L	5	0.10
Sulfate		3400	mg/L	5	1

Sample: 163947 - 0143-HMW11-0101

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC08951 Date Analyzed: 1/30/01
Analyst: DG Preparation Method: N/A Prep Batch: PB07716 Date Prepared: 1/30/01

Param	Flag	Result	Units	Dilution	RDL
Bromide		<20	mg/L	10	2
CL		350	mg/L	10	2
Fluoride		<2.0	mg/L	10	0.20
Nitrite-N		<1.00	mg/L	10	0.10
Nitrate-N		120	mg/L	10	0.10
Sulfate		10000	mg/L	10	1

Sample: 163949 - 0143-HMW43-0101

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC08951 Date Analyzed: 1/30/01
Analyst: DG Preparation Method: N/A Prep Batch: PB07716 Date Prepared: 1/30/01

Param	Flag	Result	Units	Dilution	RDL
Bromide		<10	mg/L	5	2
CL		530	mg/L	5	2
Fluoride		4.2	mg/L	5	0.20
Nitrite-N		<0.5	mg/L	5	0.10
Nitrate-N		20	mg/L	5	0.10
Sulfate		5000	mg/L	5	1

Sample: 163951 - 0143-HMW13-0101

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC08951 Date Analyzed: 1/30/01
Analyst: DG Preparation Method: N/A Prep Batch: PB07716 Date Prepared: 1/30/01

Param	Flag	Result	Units	Dilution	RDL
Bromide		<10	mg/L	5	2
CL		380	mg/L	5	2
Fluoride		4.2	mg/L	5	0.20
Nitrite-N		<0.5	mg/L	5	0.10
Nitrate-N		23	mg/L	5	0.10
Sulfate		3400	mg/L	5	1

Sample: 164014 - 0143-HMW38-0101

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC09082 Date Analyzed: 2/1/01
Analyst: DG Preparation Method: N/A Prep Batch: PB07817 Date Prepared: 2/1/01

Param	Flag	Result	Units	Dilution	RDL
Bromide		<20	mg/L	10	2
CL		1800	mg/L	10	2
Fluoride		8.40	mg/L	10	0.20
Nitrite-N		<1.00	mg/L	10	0.10
Nitrate-N		23	mg/L	10	0.10
Sulfate		9500	mg/L	10	1

Sample: 164016 - 0143-HMW37-0101

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC09082 Date Analyzed: 2/1/01
Analyst: DG Preparation Method: N/A Prep Batch: PB07817 Date Prepared: 2/1/01

Param	Flag	Result	Units	Dilution	RDL
Bromide		<20	mg/L	10	2
CL		410	mg/L	10	2
Fluoride		4.5	mg/L	10	0.20
Nitrite-N		<1.00	mg/L	10	0.10
Nitrate-N		25	mg/L	10	0.10
Sulfate		4000	mg/L	10	1

Sample: 164115 - 0143-HMW39-0101

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC09082 Date Analyzed: 2/1/01
Analyst: DG Preparation Method: N/A Prep Batch: PB07817 Date Prepared: 2/1/01

Param	Flag	Result	Units	Dilution	RDL
Bromide		<20	mg/L	10	2
CL		4000	mg/L	10	2
Fluoride		6.6	mg/L	10	0.20
Nitrite-N		<1.0	mg/L	10	0.10
Nitrate-N		170	mg/L	10	0.10
Sulfate		8500	mg/L	10	1

Sample: 164117 - 0143-HMW36-0101

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC09082 Date Analyzed: 2/1/01
Analyst: DG Preparation Method: N/A Prep Batch: PB07817 Date Prepared: 2/1/01

Param	Flag	Result	Units	Dilution	RDL
Bromide		<10	mg/L	5	2
CL		210	mg/L	5	2
Fluoride		5.9	mg/L	5	0.20
Nitrite-N		<0.5	mg/L	5	0.10
Nitrate-N		11	mg/L	5	0.10
Sulfate		470	mg/L	5	1

Sample: 164119 - 0143-HMW39-0101-QC

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC09082 Date Analyzed: 2/1/01
Analyst: DG Preparation Method: N/A Prep Batch: PB07817 Date Prepared: 2/1/01

Param	Flag	Result	Units	Dilution	RDL
Bromide		<20	mg/L	10	2
CL		3900	mg/L	10	2
Fluoride		3.8	mg/L	10	0.20
Nitrite-N		<1.0	mg/L	10	0.10
Nitrate-N		66	mg/L	10	0.10
Sulfate		9400	mg/L	10	1

Sample: 164121 - 0143-HMW40-0101

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC09082 Date Analyzed: 2/1/01
Analyst: DG Preparation Method: N/A Prep Batch: PB07817 Date Prepared: 2/1/01

Param	Flag	Result	Units	Dilution	RDL
Bromide		<100	mg/L	50	2
CL		10000	mg/L	50	2
Fluoride		12	mg/L	50	0.20
Nitrite-N		<5.0	mg/L	50	0.10
Nitrate-N		280	mg/L	50	0.10
Sulfate		17000	mg/L	50	1

Sample: 164123 - 0143-HMW41-0101

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC09082 Date Analyzed: 2/1/01
Analyst: DG Preparation Method: N/A Prep Batch: PB07817 Date Prepared: 2/1/01

Param	Flag	Result	Units	Dilution	RDL
Bromide		<20	mg/L	10	2
CL		9800	mg/L	50	2
Fluoride		3.6	mg/L	10	0.20
Nitrite-N		<5.0	mg/L	50	0.10
Nitrate-N		190	mg/L	50	0.10
Sulfate		16000	mg/L	50	1

Quality Control Report
Method Blank

Method Blank QCBatch: QC08951

Param	Flag	Results	Units	Reporting Limit
Bromide		<2.0	mg/L	2
CL		<2.0	mg/L	2
Fluoride		<0.20	mg/L	0.20
Nitrite-N		<0.10	mg/L	0.10
Nitrate-N		<0.10	mg/L	0.10
Sulfate		<1.0	mg/L	1

Method Blank QCBatch: QC09082

Param	Flag	Results	Units	Reporting Limit
Bromide		<2.0	mg/L	2
CL		<2.0	mg/L	2
Fluoride		<0.20	mg/L	0.20
Nitrite-N		<0.10	mg/L	0.10
Nitrate-N		<0.10	mg/L	0.10
Sulfate		<1.0	mg/L	1

Quality Control Report
Matrix Spikes and Duplicate Spikes

MS QC Batch: QC08951

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Bromide		89.5	mg/L	1	100	<10	89		80 - 120	20
CL		2500	mg/L	1	2000	530	98		80 - 120	20
Fluoride		46.9	mg/L	1	50	4.2	85		80 - 120	20
Nitrite-N		23.3	mg/L	1	25	<0.5	93		80 - 120	20
Nitrate-N		43.4	mg/L	1	25	20	93		80 - 120	20
Sulfate		10000	mg/L	1	5000	5000	100		80 - 120	20

MSD QC Batch: QC08951

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Bromide		89.8	mg/L	1	100	<10	89	0	80 - 120	20
CL		2480	mg/L	1	2000	530	97	1	80 - 120	20

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Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Fluoride		47.2	mg/L	1	50	4.2	86	1	80 - 120	20
Nitrite-N		23.2	mg/L	1	25	<0.5	92	0	80 - 120	20
Nitrate-N		43.4	mg/L	1	25	20	93	0	80 - 120	20
Sulfate		10000	mg/L	1	5000	5000	100	0	80 - 120	20

MS QC Batch: QC09082

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Bromide		90.8	mg/L	1	100	<10	90		80 - 120	20
CL		314	mg/L	1	100	210	104		80 - 120	20
Fluoride		50.6	mg/L	1	50	5.9	89		80 - 120	20
Nitrite-N		28.3	mg/L	1	25	<0.5	113		80 - 120	20
Nitrate-N		41.0	mg/L	1	25	11	120		80 - 120	20
Sulfate		730	mg/L	1	250	470	104		80 - 120	20

MSD QC Batch: QC09082

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Bromide		88.7	mg/L	1	100	<10	88	2	80 - 120	20
CL		314	mg/L	1	100	210	104	0	80 - 120	20
Fluoride		49.2	mg/L	1	50	5.9	86	3	80 - 120	20
Nitrite-N		27.2	mg/L	1	25	<0.5	108	4	80 - 120	20
Nitrate-N		34.8	mg/L	1	25	11	95	16	80 - 120	20
Sulfate		730	mg/L	1	250	470	104	0	80 - 120	20

Quality Control Report
Continuing Calibration Verification Standards

CCV (1) QC Batch: QC08951

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	20	19.91	99	80 - 120	1/30/01
CL		mg/L	20	19.1	95	80 - 120	1/30/01
Fluoride		mg/L	10	10.3	103	80 - 120	1/30/01
Nitrite-N		mg/L	5	4.96	99	80 - 120	1/30/01
Nitrate-N		mg/L	5	4.7	94	80 - 120	1/30/01
Sulfate		mg/L	50	49.1	98	80 - 120	1/30/01

ICV (1) QC Batch: QC08951

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	20	19.98	99	80 - 120	1/30/01
CL		mg/L	20	19.4	97	80 - 120	1/30/01
Fluoride		mg/L	10	10.1	101	80 - 120	1/30/01
Nitrite-N		mg/L	5	5.01	100	80 - 120	1/30/01
Nitrate-N		mg/L	5	4.73	94	80 - 120	1/30/01
Sulfate		mg/L	50	49.3	98	80 - 120	1/30/01

CCV (1) QC Batch: QC09082

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	20	20.2	101	80 - 120	2/1/01
CL		mg/L	20	19.5	97	80 - 120	2/1/01
Fluoride		mg/L	10	10.4	104	80 - 120	2/1/01
Nitrite-N		mg/L	5	5.19	103	80 - 120	2/1/01
Nitrate-N		mg/L	5	4.88	97	80 - 120	2/1/01
Sulfate		mg/L	50	50.7	101	80 - 120	2/1/01

ICV (1) QC Batch: QC09082

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	20	20.0	100	80 - 120	2/1/01
CL		mg/L	20	19.0	95	80 - 120	2/1/01
Fluoride		mg/L	10	10.1	101	80 - 120	2/1/01
Nitrite-N		mg/L	5	5.01	100	80 - 120	2/1/01
Nitrate-N		mg/L	5	4.73	94	80 - 120	2/1/01
Sulfate		mg/L	50	50.8	101	80 - 120	2/1/01

Ammonia Results and Quality Control

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Analytical and Quality Control Report

Karen Costa
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P.O. Box 399 Bldg. 126
WSMR, NM 88002

Report Date: March 5, 2001

Order ID Number: A01013023

Project Number: 700 A21
Project Name: Groundwater Sampling HELSTF Chrome Site
Project Location: N/A

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
163945	0143-HMW13-0101-QC	Water	1/29/01	12:35	1/30/01
163947	0143-HMW11-0101	Water	1/29/01	10:29	1/30/01
163949	0143-HMW43-0101	Water	1/29/01	14:02	1/30/01
163951	0143-HMW13-0101	Water	1/29/01	12:35	1/30/01
164014	0143-HMW38-0101	Water	1/30/01	11:28	1/31/01
164016	0143-HMW37-0101	Water	1/30/01	12:00	1/31/01
164115	0143-HMW39-0101	Water	1/31/01	11:57	1/31/01
164117	0143-HMW36-0101	Water	1/31/01	11:10	1/31/01
164119	0143-HMW39-0101-QC	Water	1/31/01	11:57	1/31/01
164121	0143-HMW40-0101	Water	1/31/01	13:12	1/31/01
164123	0143-HMW41-0101	Water	1/31/01	12:20	1/31/01

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 8 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 163945 - 0143-HMW13-0101-QC

Analysis:	NH3	Analytical Method:	SM 4500-NH3 B,E	QC Batch:	QC08715	Date Analyzed:	2/1/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07538	Date Prepared:	2/1/01

Param	Flag	Result	Units	Dilution	RDL
Ammonia-N		<2.0	mg/L	1	2

Sample: 163947 - 0143-HMW11-0101

Analysis:	NH3	Analytical Method:	SM 4500-NH3 B,E	QC Batch:	QC08716	Date Analyzed:	2/1/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07539	Date Prepared:	2/1/01

Param	Flag	Result	Units	Dilution	RDL
Ammonia-N		<2.0	mg/L	1	2

Sample: 163949 - 0143-HMW43-0101

Analysis:	NH3	Analytical Method:	SM 4500-NH3 B,E	QC Batch:	QC08715	Date Analyzed:	2/1/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07538	Date Prepared:	2/1/01

Param	Flag	Result	Units	Dilution	RDL
Ammonia-N		<2.0	mg/L	1	2

Sample: 163951 - 0143-HMW13-0101

Analysis:	NH3	Analytical Method:	SM 4500-NH3 B,E	QC Batch:	QC08715	Date Analyzed:	2/1/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07538	Date Prepared:	2/1/01

Param	Flag	Result	Units	Dilution	RDL
Ammonia-N		<2.0	mg/L	1	2

Sample: 164014 - 0143-HMW38-0101

Analysis:	NH3	Analytical Method:	SM 4500-NH3 B,E	QC Batch:	QC08843	Date Analyzed:	2/6/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07627	Date Prepared:	2/6/01

Param	Flag	Result	Units	Dilution	RDL
Ammonia-N		<2.0	mg/L	1	2

Sample: 164016 - 0143-HMW37-0101

Analysis:	NH3	Analytical Method:	SM 4500-NH3 B,E	QC Batch:	QC08843	Date Analyzed:	2/6/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07627	Date Prepared:	2/6/01

Param	Flag	Result	Units	Dilution	RDL
Ammonia-N		<2.0	mg/L	1	2

Sample: 164115 - 0143-HMW39-0101

Analysis:	NH3	Analytical Method:	SM 4500-NH3 B,E	QC Batch:	QC09316	Date Analyzed:	2/23/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB08014	Date Prepared:	2/23/01

Param	Flag	Result	Units	Dilution	RDL
Ammonia-N		<2.0	mg/L	1	2

Sample: 164117 - 0143-HMW36-0101

Analysis:	NH3	Analytical Method:	SM 4500-NH3 B,E	QC Batch:	QC08843	Date Analyzed:	2/6/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07627	Date Prepared:	2/6/01

Param	Flag	Result	Units	Dilution	RDL
Ammonia-N		<2.0	mg/L	1	2

Sample: 164119 - 0143-HMW39-0101-QC

Analysis:	NH3	Analytical Method:	SM 4500-NH3 B,E	QC Batch:	QC08843	Date Analyzed:	2/6/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07627	Date Prepared:	2/6/01

Param	Flag	Result	Units	Dilution	RDL
Ammonia-N		<2.0	mg/L	1	2

Sample: 164121 - 0143-HMW40-0101

Analysis:	NH3	Analytical Method:	SM 4500-NH3 B,E	QC Batch:	QC08843	Date Analyzed:	2/6/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07627	Date Prepared:	2/6/01

Param	Flag	Result	Units	Dilution	RDL
Ammonia-N		<2.0	mg/L	1	2

Sample: 164123 - 0143-HMW41-0101

Analysis:	NH3	Analytical Method:	SM 4500-NH3 B,E	QC Batch:	QC08843	Date Analyzed:	2/6/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07627	Date Prepared:	2/6/01

Param	Flag	Result	Units	Dilution	RDL
Ammonia-N		<2.0	mg/L	1	2

Quality Control Report
Method Blank

Method Blank QCBatch: QC08715

Param	Flag	Results	Units	Reporting Limit
Ammonia-N		<2.0	mg/L	2

Method Blank QCBatch: QC08716

Param	Flag	Results	Units	Reporting Limit
Ammonia-N		<2.0	mg/L	2

Method Blank QCBatch: QC08843

Param	Flag	Results	Units	Reporting Limit
Ammonia-N		<2.0	mg/L	2

Method Blank QCBatch: QC09316

Param	Flag	Results	Units	Reporting Limit
Ammonia-N		<2.0	mg/L	2

Quality Control Report
Lab Control Spikes and Duplicate Spikes

LCS QC Batch: QC08715

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Ammonia-N		4.93	mg/L	1	5	<2.0	98		80 - 120	20

LCSD QC Batch: QC08715

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Ammonia-N		4.59	mg/L	1	5	<2.0	91	7	80 - 120	20

LCS QC Batch: QC08716

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Ammonia-N		4.93	mg/L	1	5	<2.0	98		80 - 120	20

LCSD QC Batch: QC08716

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Ammonia-N		4.59	mg/L	1	5	<2.0	91	7	80 - 120	20

LCS QC Batch: QC08843

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Ammonia-N		4.98	mg/L	1	5	<2.0	99		80 - 120	20

LCSD QC Batch: QC08843

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Ammonia-N		4.82	mg/L	1	5	<2.0	96	3	80 - 120	20

LCS QC Batch: QC09316

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Ammonia-N		4.82	mg/L	1	5	<2.0	96		80 - 120	20

LCSD QC Batch: QC09316

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Ammonia-N		4.65	mg/L	1	5	<2.0	93	4	80 - 120	20

Quality Control Report
Matrix Spikes and Duplicate Spikes

MS QC Batch: QC08715

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Ammonia-N		4.98	mg/L	1	5	<2.0	99		80 - 120	20

MSD QC Batch: QC08715

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Ammonia-N		4.98	mg/L	1	5	<2.0	99	0	80 - 120	20

MS QC Batch: QC08716

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Ammonia-N		5.10	mg/L	1	5	<2.0	102		80 - 120	20

MSD QC Batch: QC08716

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Ammonia-N		4.98	mg/L	1	5	<2.0	99	2	80 - 120	20

MS QC Batch: QC08843

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Ammonia-N		4.87	mg/L	1	5	<2.0	97		80 - 120	20

MSD QC Batch: QC08843

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Ammonia-N		5.10	mg/L	1	5	<2.0	102	5	80 - 120	20

MS QC Batch: QC09316

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Ammonia-N		4.65	mg/L	1	5	<2.0	93		80 - 120	20

MSD QC Batch: QC09316

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Ammonia-N		4.59	mg/L	1	5	<2.0	91	1	80 - 120	20

Quality Control Report
Continuing Calibration Verification Standards

CCV (1) QC Batch: QC08715

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5	4.93	98	80 - 120	2/1/01

ICV (1) QC Batch: QC08715

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5	4.87	97	80 - 120	2/1/01

CCV (1) QC Batch: QC08716

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5	4.93	98	80 - 120	2/1/01

ICV (1) QC Batch: QC08716

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5	4.87	97	80 - 120	2/1/01

CCV (1) QC Batch: QC08843

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5	4.70	94	80 - 120	2/6/01

ICV (1) QC Batch: QC08843

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5	4.93	98	80 - 120	2/6/01

CCV (1) QC Batch: QC09316

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5	4.87	97	80 - 120	2/23/01

ICV (1) QC Batch: QC09316

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ammonia-N		mg/L	5	4.76	95	80 - 120	2/23/01

TKN Results and Quality Control

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Karen Costa
Mevatec
P.O. Box 399 Bldg. 126
WSMR, NM 88002

Report Date: March 5, 2001

Order ID Number: A01013023

Project Number: 700 A21
Project Name: Groundwater Sampling HELSTF Chrome Site
Project Location: N/A

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
163945	0143-HMW13-0101-QC	Water	1/29/01	12:35	1/30/01
163947	0143-HMW11-0101	Water	1/29/01	10:29	1/30/01
163949	0143-HMW43-0101	Water	1/29/01	14:02	1/30/01
163951	0143-HMW13-0101	Water	1/29/01	12:35	1/30/01
164014	0143-HMW38-0101	Water	1/30/01	11:28	1/31/01
164016	0143-HMW37-0101	Water	1/30/01	12:00	1/31/01
164115	0143-HMW39-0101	Water	1/31/01	11:57	1/31/01
164117	0143-HMW36-0101	Water	1/31/01	11:10	1/31/01
164119	0143-HMW39-0101-QC	Water	1/31/01	11:57	1/31/01
164121	0143-HMW40-0101	Water	1/31/01	13:12	1/31/01
164123	0143-HMW41-0101	Water	1/31/01	12:20	1/31/01

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 6 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael T. Abel
Dr. Blair Leftwich, Director

Analytical Report

Sample: 163945 - 0143-HMW13-0101-QC

Analysis:	TKN	Analytical Method:	E 351.3	QC Batch:	QC08717	Date Analyzed:	2/1/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07540	Date Prepared:	2/1/01

Param	Flag	Result	Units	Dilution	RDL
Total Kjeldahl Nitrogen - N		<12.5	mg/L	1	12.50

Sample: 163947 - 0143-HMW11-0101

Analysis:	TKN	Analytical Method:	E 351.3	QC Batch:	QC08865	Date Analyzed:	2/7/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07643	Date Prepared:	2/7/01

Param	Flag	Result	Units	Dilution	RDL
Total Kjeldahl Nitrogen - N		<12.5	mg/L	1	12.50

Sample: 163949 - 0143-HMW43-0101

Analysis:	TKN	Analytical Method:	E 351.3	QC Batch:	QC08717	Date Analyzed:	2/1/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07540	Date Prepared:	2/1/01

Param	Flag	Result	Units	Dilution	RDL
Total Kjeldahl Nitrogen - N		<12.5	mg/L	1	12.50

Sample: 163951 - 0143-HMW13-0101

Analysis:	TKN	Analytical Method:	E 351.3	QC Batch:	QC08717	Date Analyzed:	2/1/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07540	Date Prepared:	2/1/01

Param	Flag	Result	Units	Dilution	RDL
Total Kjeldahl Nitrogen - N		<12.5	mg/L	1	12.50

Sample: 164014 - 0143-HMW38-0101

Analysis:	TKN	Analytical Method:	E 351.3	QC Batch:	QC08865	Date Analyzed:	2/7/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07643	Date Prepared:	2/7/01

Param	Flag	Result	Units	Dilution	RDL
Total Kjeldahl Nitrogen - N		<12.5	mg/L	1	12.50

Sample: 164016 - 0143-HMW37-0101

Analysis:	TKN	Analytical Method:	E 351.3	QC Batch:	QC08865	Date Analyzed:	2/7/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07643	Date Prepared:	2/7/01

Param	Flag	Result	Units	Dilution	RDL
Total Kjeldahl Nitrogen - N		<12.5	mg/L	1	12.50

Sample: 164115 - 0143-HMW39-0101

Analysis:	TKN	Analytical Method:	E 351.3	QC Batch:	QC08865	Date Analyzed:	2/7/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07643	Date Prepared:	2/7/01

Param	Flag	Result	Units	Dilution	RDL
Total Kjeldahl Nitrogen - N		<12.5	mg/L	1	12.50

Sample: 164117 - 0143-HMW36-0101

Analysis:	TKN	Analytical Method:	E 351.3	QC Batch:	QC08865	Date Analyzed:	2/7/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07643	Date Prepared:	2/7/01

Param	Flag	Result	Units	Dilution	RDL
Total Kjeldahl Nitrogen - N		< 12.5	mg/L	1	12.50

Sample: 164119 - 0143-HMW39-0101-QC

Analysis:	TKN	Analytical Method:	E 351.3	QC Batch:	QC08865	Date Analyzed:	2/7/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07643	Date Prepared:	2/7/01

Param	Flag	Result	Units	Dilution	RDL
Total Kjeldahl Nitrogen - N		<12.5	mg/L	1	12.50

Sample: 164121 - 0143-HMW40-0101

Analysis:	TKN	Analytical Method:	E 351.3	QC Batch:	QC08865	Date Analyzed:	2/7/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07643	Date Prepared:	2/7/01

Param	Flag	Result	Units	Dilution	RDL
Total Kjeldahl Nitrogen - N		<12.5	mg/L	1	12.50

Sample: 164123 - 0143-HMW41-0101

Analysis:	TKN	Analytical Method:	E 351.3	QC Batch:	QC08865	Date Analyzed:	2/7/01
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB07643	Date Prepared:	2/7/01

Param	Flag	Result	Units	Dilution	RDL
Total Kjeldahl Nitrogen - N		<12.5	mg/L	1	12.50

Quality Control Report
Method Blank

Method Blank QCBatch: QC08717

Param	Flag	Results	Units	Reporting Limit
Total Kjeldahl Nitrogen - N		<12.5	mg/L	12.50

Method Blank QCBatch: QC08865

Param	Flag	Results	Units	Reporting Limit
Total Kjeldahl Nitrogen - N		<12.5	mg/L	12.50

Quality Control Report
Lab Control Spikes and Duplicate Spikes

LCS QC Batch: QC08717

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N		48.4	mg/L	1	50	<12.5	96		80 - 120	20

LCSD QC Batch: QC08717

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N		50.1	mg/L	1	50	<12.5	100	3	80 - 120	20

LCS QC Batch: QC08865

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N		44.5	mg/L	1	50	<12.5	89		80 - 120	20

LCSD QC Batch: QC08865

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N		43.7	mg/L	1	50	<5	87	2	80 - 120	20

Quality Control Report
Matrix Spikes and Duplicate Spikes

MS QC Batch: QC08717

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	[1]	35.0	mg/L	1	50	<12.5	70		80 - 120	20

MSD QC Batch: QC08717

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	[2]	34.7	mg/L	1	50	<12.5	69	1	80 - 120	20

MS QC Batch: QC08865

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	[3]	25.2	mg/L	1	50	<12.5	50		80 - 120	20

MSD QC Batch: QC08865

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Kjeldahl Nitrogen - N	[4]	25.2	mg/L	1	50	<12.5	50	0	80 - 120	20

Quality Control Report
Continuing Calibration Verification Standards

[1] Poor MS/MSD recovery due to matrix probelems. LCS/LCSD show that the method was in control.
[2] Poor MS/MSD recovery due to matrix probelems. LCS/LCSD show that the method was in control.
[3] Poor MS/MSD recovery due to matrix probelems. LCS/LCSD show that the method was in control.
[4] Poor MS/MSD recovery due to matrix probelems. LCS/LCSD show that the method was in control.

Continuing Calibration Verification Standards

CCV (1) QC Batch: QC08717

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5	4.87	97	80 - 120	2/1/01

ICV (1) QC Batch: QC08717

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5	4.76	95	80 - 120	2/1/01

CCV (1) QC Batch: QC08865

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5	4.37	87	80 - 120	2/7/01

ICV (1) QC Batch: QC08865

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		mg/L	5	4.48	89	80 - 120	2/7/01

Hexavalent Chromium Results and Quality Control

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Karen Costa
Mevatec
P.O. Box 399 Bldg. 126
WSMR, NM 88002

Report Date: March 6, 2001

Order ID Number: A01013023

Project Number: 700 A21
Project Name: Groundwater Sampling HELSTF Chrome Site
Project Location: N/A

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
163945	0143-HMW13-0101-QC	Water	1/29/01	12:35	1/30/01
163947	0143-HMW11-0101	Water	1/29/01	10:29	1/30/01
163949	0143-HMW43-0101	Water	1/29/01	14:02	1/30/01
163951	0143-HMW13-0101	Water	1/29/01	12:35	1/30/01
164014	0143-HMW38-0101	Water	1/30/01	11:28	1/31/01
164016	0143-HMW37-0101	Water	1/30/01	12:00	1/31/01
164115	0143-HMW39-0101	Water	1/31/01	11:57	1/31/01
164117	0143-HMW36-0101	Water	1/31/01	11:10	1/31/01
164119	0143-HMW39-0101-QC	Water	1/31/01	11:57	1/31/01
164121	0143-HMW40-0101	Water	1/31/01	13:12	1/31/01
164123	0143-HMW41-0101	Water	1/31/01	12:20	1/31/01

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

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Michael T. Blair
Dr. Blair Leftwich, Director

Analytical Report

Sample: 163945 - 0143-HMW13-0101-QC

Analysis:	CR6	Analytical Method:	SM 3500-Cr D	QC Batch:	QC09097	Date Analyzed:	1/30/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07830	Date Prepared:	1/30/01

Param	Flag	Result	Units	Dilution	RDL
Hexavalent Chromium		<0.05	mg/L	1	0.05

Sample: 163947 - 0143-HMW11-0101

Analysis:	CR6	Analytical Method:	SM 3500-Cr D	QC Batch:	QC09097	Date Analyzed:	1/30/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07830	Date Prepared:	1/30/01

Param	Flag	Result	Units	Dilution	RDL
Hexavalent Chromium		0.35	mg/L	1	0.05

Sample: 163949 - 0143-HMW43-0101

Analysis:	CR6	Analytical Method:	SM 3500-Cr D	QC Batch:	QC09097	Date Analyzed:	1/30/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07830	Date Prepared:	1/30/01

Param	Flag	Result	Units	Dilution	RDL
Hexavalent Chromium		<0.05	mg/L	1	0.05

Sample: 163951 - 0143-HMW13-0101

Analysis:	CR6	Analytical Method:	SM 3500-Cr D	QC Batch:	QC09097	Date Analyzed:	1/30/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07830	Date Prepared:	1/30/01

Param	Flag	Result	Units	Dilution	RDL
Hexavalent Chromium		<0.05	mg/L	1	0.05

Sample: 164014 - 0143-HMW38-0101

Analysis:	CR6	Analytical Method:	SM 3500-Cr D	QC Batch:	QC09098	Date Analyzed:	1/31/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07831	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Hexavalent Chromium		<0.05	mg/L	1	0.05

Sample: 164016 - 0143-HMW37-0101

Analysis:	CR6	Analytical Method:	SM 3500-Cr D	QC Batch:	QC09098	Date Analyzed:	1/31/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07831	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Hexavalent Chromium		<0.05	mg/L	1	0.05

Sample: 164115 - 0143-HMW39-0101

Analysis:	CR6	Analytical Method:	SM 3500-Cr D	QC Batch:	QC09098	Date Analyzed:	1/31/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07831	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Hexavalent Chromium		0.440	mg/L	1	0.05

Sample: 164117 - 0143-HMW36-0101

Analysis:	CR6	Analytical Method:	SM 3500-Cr D	QC Batch:	QC09098	Date Analyzed:	1/31/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07831	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Hexavalent Chromium		<0.05	mg/L	1	0.05

Sample: 164119 - 0143-HMW39-0101-QC

Analysis:	CR6	Analytical Method:	SM 3500-Cr D	QC Batch:	QC09098	Date Analyzed:	1/31/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07831	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Hexavalent Chromium		0.430	mg/L	1	0.05

Sample: 164121 - 0143-HMW40-0101

Analysis:	CR6	Analytical Method:	SM 3500-Cr D	QC Batch:	QC09098	Date Analyzed:	1/31/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07831	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Hexavalent Chromium		0.061	mg/L	1	0.05

Sample: 164123 - 0143-HMW41-0101

Analysis:	CR6	Analytical Method:	SM 3500-Cr D	QC Batch:	QC09098	Date Analyzed:	1/31/01
Analyst:	DG	Preparation Method:	N/A	Prep Batch:	PB07831	Date Prepared:	1/31/01

Param	Flag	Result	Units	Dilution	RDL
Hexavalent Chromium		2.5	mg/L	1	0.05

Quality Control Report
Method Blank

Method Blank QCBatch: QC09097

Param	Flag	Results	Units	Reporting Limit
Hexavalent Chromium		<0.05	mg/L	0.05

Method Blank QCBatch: QC09098

Param	Flag	Results	Units	Reporting Limit
Hexavalent Chromium		<0.05	mg/L	0.05

Quality Control Report
Matrix Spikes and Duplicate Spikes

MS QC Batch: QC09097

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Hexavalent Chromium		0.505	mg/L	1	0.50	<0.05	101		80 - 120	20

MSD QC Batch: QC09097

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Hexavalent Chromium		0.495	mg/L	1	0.50	<0.05	99	2	80 - 120	20

MS QC Batch: QC09098

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Hexavalent Chromium		0.506	mg/L	1	0.50	<0.05	101		80 - 120	20

MSD QC Batch: QC09098

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Hexavalent Chromium		0.505	mg/L	1	0.50	<0.05	101	0	80 - 120	20

Quality Control Report
Continuing Calibration Verification Standards

CCV (1) QC Batch: QC09097

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.50	0.477	95	80 - 120	1/30/01

ICV (1) QC Batch: QC09097

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.50	0.479	95	80 - 120	1/30/01

CCV (1) QC Batch: QC09098

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.50	0.480	96	80 - 120	1/31/01

ICV (1) QC Batch: QC09098

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hexavalent Chromium		mg/L	0.50	0.484	96	80 - 120	1/31/01

Subbed Analysis Results and Quality Control

-Ammonium Perchlorate
-Herbicides
-Total Metals
-Dissolved Metals
-Total Phosphorous

ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I2565
TraceAnalysis, Inc.
6701 Aberdeen Ave, Suite 9
Lubbock, TX 79424-

Attn: Nel Green

Report Date: *13-Feb-01*

Phone: (800) 378-1296 **Ext:**
FAX: (806) 794-1298

Our Lab #: 020101062
Date Logged-In: 2/1/01
Matrix: Water
Project #: HELSTF Chrom

Your Sample ID: 0143-HMW15-0101-QC-163945
Sample Source: Groundwater Monitoring
Client Project #:
PO#: 700A21
Date Submitted to Lab: 2/1/2001

- COLLECTION INFORMATION -

Date/Time/By: 1/29/01 12:35 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
NH4CLO4	314.0	Ammonium Perchlorate, aq	< 17.7	ug/L	2/8/01	JMN	2850

End of Report

Report Approved By: R Mosher

Arizona Lab License No. AZ0009

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Aqua Tech Environmental Laboratories, Inc.

- QUALITY CONTROL REPORT -

Printed: 2/13/2001

WS#	Lab#	Test ID	QC Code	Result	Units	True Added	-- QC Calculations -- QC1	-- QC Calculations -- QC2	Lower Limit	Upper Limit
2850	020101008M	PER	M	23.5	ug/L	25	94 %R:	3 %RPD	80	120
2850	020101008S	PER	S	22.7	ug/L	25	91 %R:		80	120
2850	Blank	PER	B	0.00	ug/L	0				
2850	Calib Check	PER	K	19.1	ug/L	20	96 %R:		85	115
2850	Calib Check	PER	K	5.15	ug/L	5	103 %R:		75	125
2850	Calib Check	PER	K	99.0	ug/L	100	99 %R:		85	115
2850	Control	PER	C	24.5	ug/L	25	98 %R:		85	115
2850	LCS	PER	C	22.0	ug/L	25	88 %R:		80	120

QC Code Legend

B Blanks	K Calibration Checks	S Spikes
C Control Samples	M Matrix Spike Duplicates	
D Duplicates	R Surrogates	

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ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I2565
TraceAnalysis, Inc.
6701 Aberdeen Ave, Suite 9
Lubbock, TX 79424-

Attn: Nel Green

Report Date: *13-Feb-01*

Phone: (800) 378-1296 **Ext:**
FAX: (806) 794-1298

Our Lab #: 020101060
Date Logged-In: 2/1/01
Matrix: Water
Project #: HELSTF Chrom

Your Sample ID: 0143-HMW11-0101-163947
Sample Source: Groundwater Monitoring
Client Project #:
PO#: 700A21
Date Submitted to Lab: 2/1/2001

- COLLECTION INFORMATION -

Date/Time/By: 1/29/01 10:29 AM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
NH4CLO4	314.0	Ammonium Perchlorate, aq	< 59.1	ug/L	2/8/01	JMN	2850

End of Report

Report Approved By: R Mosher

ATEL

Aqua Tech Environmental Laboratories, Inc.

- QUALITY CONTROL REPORT -

Printed: 2/13/2001

WS#	Lab#	Test ID	QC Code	Result	Units	True Added	-- QC Calculations -- QC1	-- QC Calculations -- QC2	Lower Limit	Upper Limit
2850	020101008M	PER	M	23.5	ug/L	25	94 %R:	3 %RPD	80	120
2850	020101008S	PER	S	22.7	ug/L	25	91 %R:		80	120
2850	Blank	PER	B	0.00	ug/L	0				
2850	Calib Check	PER	K	19.1	ug/L	20	96 %R:		85	115
2850	Calib Check	PER	K	5.15	ug/L	5	103 %R:		75	125
2850	Calib Check	PER	K	99.0	ug/L	100	99 %R:		85	115
2850	Control	PER	C	24.5	ug/L	25	98 %R:		85	115
2850	LCS	PER	C	22.0	ug/L	25	88 %R:		80	120

QC Code Legend

B	Blanks	K	Calibration Checks	S	Spikes
C	Control Samples	M	Matrix Spike Duplicates		
D	Duplicates	R	Surrogates		

2700 E. BILBY ROAD • BUILDING A • TUCSON, AZ 85706
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- CERTIFICATE OF ANALYSIS -

Client #: I2565
TraceAnalysis, Inc.
6701 Aberdeen Ave, Suite 9
Lubbock, TX 79424-

Attn: Nel Green

Report Date: *13-Feb-01*

Phone: (800) 378-1296 **Ext:**
FAX: (806) 794-1298

Our Lab #: 020101063
Date Logged-In: 2/1/01
Matrix: Water
Project #: HELSTF Chrom

Your Sample ID: 0143-HMW43-0101-163949
Sample Source: Groundwater Monitoring
Client Project #:
PO#: 700A21
Date Submitted to Lab: 2/1/2001

- COLLECTION INFORMATION -

Date/Time/By: 1/29/01 2:02 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
NH4CLO4	314.0	Ammonium Perchlorate, aq	< 29.5	ug/L	2/8/01	JMN	2850

End of Report

Report Approved By: R Mosher

Arizona Lab License No. AZ0009

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PHONE 520-573-6565 • 1-800-879-2835 • FAX 520-573-6550

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Aqua Tech Environmental Laboratories, Inc.

- QUALITY CONTROL REPORT -

Printed: 2/13/2001

WS#	Lab#	Test ID	QC Code	Result	Units	True Added	-- QC Calculations -- QC1	-- QC Calculations -- QC2	Lower Limit	Upper Limit
2850	020101008M	PER	M	23.5	ug/L	25	94 %R:	3 %RPD	80	120
2850	020101008S	PER	S	22.7	ug/L	25	91 %R:		80	120
2850	Blank	PER	B	0.00	ug/L	0				
2850	Calib Check	PER	K	19.1	ug/L	20	96 %R:		85	115
2850	Calib Check	PER	K	5.15	ug/L	5	103 %R:		75	125
2850	Calib Check	PER	K	99.0	ug/L	100	99 %R:		85	115
2850	Control	PER	C	24.5	ug/L	25	98 %R:		85	115
2850	LCS	PER	C	22.0	ug/L	25	88 %R:		80	120

QC Code Legend

B	Blanks	K	Calibration Checks	S	Spikes
C	Control Samples	M	Matrix Spike Duplicates		
D	Duplicates	R	Surrogates		

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Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I2565
TraceAnalysis, Inc.
6701 Aberdeen Ave, Suite 9
Lubbock, TX 79424-

Attn: Nel Green

Report Date: *13-Feb-01*

Phone: (800) 378-1296 **Ext:**
FAX: (806) 794-1298

Our Lab #: 020101061
Date Logged-In: 2/1/01
Matrix: Water
Project #: HELSTF Chrom

Your Sample ID: 0143-HMW13-0101-163951
Sample Source: Groundwater Monitoring
Client Project #:
PO#: 700A21
Date Submitted to Lab: 2/1/2001

- COLLECTION INFORMATION -

Date/Time/By: 1/29/01 12:35 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
NH4CLO4	314.0	Ammonium Perchlorate, aq	< 17.7	ug/L	2/8/01	JMN	2850

End of Report

Report Approved By: R Mosher

Arizona Lab License No. AZ0009

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- QUALITY CONTROL REPORT -

Printed: 2/13/2001

WS#	Lab#	Test ID	QC Code	Result	Units	True Added	-- QC Calculations -- QC1	-- QC Calculations -- QC2	Lower Limit	Upper Limit
2850	020101008M	PER	M	23.5	ug/L	25	94 %R:	3 %RPD	80	120
2850	020101008S	PER	S	22.7	ug/L	25	91 %R:		80	120
2850	Blank	PER	B	0.00	ug/L	0				
2850	Calib Check	PER	K	19.1	ug/L	20	96 %R:		85	115
2850	Calib Check	PER	K	5.15	ug/L	5	103 %R:		75	125
2850	Calib Check	PER	K	99.0	ug/L	100	99 %R:		85	115
2850	Control	PER	C	24.5	ug/L	25	98 %R:		85	115
2850	LCS	PER	C	22.0	ug/L	25	88 %R:		80	120

QC Code Legend

B	Blanks	K	Calibration Checks	S	Spikes
C	Control Samples	M	Matrix Spike Duplicates		
D	Duplicates	R	Surrogates		

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- CERTIFICATE OF ANALYSIS -

Client #: I2565
TraceAnalysis, Inc.
6701 Aberdeen Ave, Suite 9
Lubbock, TX 79424-

Attn: Nel Green

Report Date: *13-Feb-01*

Phone: (800) 378-1296 **Ext:**
FAX: (806) 794-1298

Our Lab #: 020101064
Date Logged-In: 2/1/01
Matrix: Water
Project #: HELSTF Chrom

Your Sample ID: 0143-HMW38-0101-164014
Sample Source: Groundwater Monitoring
Client Project #:
PO#: 700A21
Date Submitted to Lab: 2/1/2001

- COLLECTION INFORMATION -

Date/Time/By: 1/30/01 11:28 AM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
NH4CLO4	314.0	Ammonium Perchlorate, aq	< 47.3	ug/L	2/8/01	JMN	2850

End of Report

Report Approved By: R Mosher

ATEL

Aqua Tech Environmental Laboratories, Inc.

- QUALITY CONTROL REPORT -

Printed: 2/13/2001

WS#	Lab#	Test ID	QC Code	Result	Units	True Added	-- QC Calculations -- QC1	-- QC Calculations -- QC2	Lower Limit	Upper Limit
2850	020101008M	PER	M	23.5	ug/L	25	94 %R:	3 %RPD	80	120
2850	020101008S	PER	S	22.7	ug/L	25	91 %R:		80	120
2850	Blank	PER	B	0.00	ug/L	0				
2850	Calib Check	PER	K	19.1	ug/L	20	96 %R:		85	115
2850	Calib Check	PER	K	5.15	ug/L	5	103 %R:		75	125
2850	Calib Check	PER	K	99.0	ug/L	100	99 %R:		85	115
2850	Control	PER	C	24.5	ug/L	25	98 %R:		85	115
2850	LCS	PER	C	22.0	ug/L	25	88 %R:		80	120

QC Code Legend

B	Blanks	K	Calibration Checks	S	Spikes
C	Control Samples	M	Matrix Spike Duplicates		
D	Duplicates	R	Surrogates		

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- CERTIFICATE OF ANALYSIS -

Client #: I2565
TraceAnalysis, Inc.
6701 Aberdeen Ave, Suite 9
Lubbock, TX 79424-

Report Date: *13-Feb-01*

Phone: (800) 378-1296 **Ext:**
FAX: (806) 794-1298

Attn: Nel Green

Our Lab #: 020101065
Date Logged-In: 2/1/01
Matrix: Water
Project #: HELSTF Chrom

Your Sample ID: 0143-HMW37-0101-164016
Sample Source: Groundwater Monitoring
Client Project #:
PO#: 700A21
Date Submitted to Lab: 2/1/2001

- COLLECTION INFORMATION -

Date/Time/By: 1/30/01 6:00 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
NH4CLO4	314.0	Ammonium Perchlorate, aq	< 17.7	ug/L	2/8/01	JMN	2850

End of Report

Report Approved By: R Mosher

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- QUALITY CONTROL REPORT -

Printed: 2/13/2001

WS#	Lab#	Test ID	QC Code	Result	Units	True Added	-- QC Calculations -- QC1	-- QC Calculations -- QC2	Lower Limit	Upper Limit
2850	020101008M	PER	M	23.5	ug/L	25	94 %R:	3 %RPD	80	120
2850	020101008S	PER	S	22.7	ug/L	25	91 %R:		80	120
2850	Blank	PER	B	0.00	ug/L	0				
2850	Calib Check	PER	K	19.1	ug/L	20	96 %R:		85	115
2850	Calib Check	PER	K	5.15	ug/L	5	103 %R:		75	125
2850	Calib Check	PER	K	99.0	ug/L	100	99 %R:		85	115
2850	Control	PER	C	24.5	ug/L	25	98 %R:		85	115
2850	LCS	PER	C	22.0	ug/L	25	88 %R:		80	120

QC Code Legend

B Blanks	K Calibration Checks	S Spikes
C Control Samples	M Matrix Spike Duplicates	
D Duplicates	R Surrogates	

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- CERTIFICATE OF ANALYSIS -

Client #: I2565
TraceAnalysis, Inc.
6701 Aberdeen Ave, Suite 9
Lubbock, TX 79424-

Attn: Nell Green

Report Date: *15-Feb-01*

Phone: (800) 378-1296 **Ext:**
FAX: (806) 794-1298

Our Lab #: 020201013
Date Logged-In: 2/2/01
Matrix: Water
Project #: HELSTF Chrom

Your Sample ID: 0143-HMW39-0101-164115
Sample Source: Groundwater Monitoring
Client Project #:
PO#: 700A21
Date Submitted to Lab: 2/2/2001

- COLLECTION INFORMATION -

Date/Time/By: 1/31/01 11:57 AM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
NH4CLO4	314.0	Ammonium Perchlorate, aq	< 59.1	ug/L	2/8/01	JMN	2850

End of Report

Report Approved By: R Mosher

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Printed: 2/15/2001

WS#	Lab#	Test ID	QC Code	Result	Units	True Added	-- QC Calculations -- QC1	-- QC Calculations -- QC2	Lower Limit	Upper Limit
2850	020101008M	PER	M	23.5	ug/L	25	94 %R:	3 %RPD	80	120
2850	020101008S	PER	S	22.7	ug/L	25	91 %R:		80	120
2852	020601003M	PER	M	24.5	ug/L	25	98 %R:	%RPD	80	120
2852	020601003S	PER	S	24.4	ug/L	25	98 %R:		80	120
2850	Blank	PER	B	0.00	ug/L	0				
2852	Blank	PER	B	0.00	ug/L	0				
2850	Calib Check	PER	K	19.1	ug/L	20	96 %R:		85	115
2852	Calib Check	PER	K	19.2	ug/L	20	96 %R:		85	115
2850	Calib Check	PER	K	5.15	ug/L	5	103 %R:		75	125
2852	Calib Check	PER	K	5.69	ug/L	5	114 %R:		75	125
2850	Calib Check	PER	K	99.0	ug/L	100	99 %R:		85	115
2852	Calib Check	PER	K	99.6	ug/L	100	100 %R:		85	115
2850	Control	PER	C	24.5	ug/L	25	98 %R:		85	115
2852	Control	PER	C	24.6	ug/L	25	98 %R:		85	115
2850	LCS	PER	C	22.0	ug/L	25	88 %R:		80	120
2852	LCS	PER	C	24.0	ug/L	25	96 %R:		80	120

QC Code Legend

B	Blanks	K	Calibration Checks	S	Spikes
C	Control Samples	M	Matrix Spike Duplicates		
D	Duplicates	R	Surrogates		

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- CERTIFICATE OF ANALYSIS -

Client #: I2565
TraceAnalysis, Inc.
6701 Aberdeen Ave, Suite 9
Lubbock, TX 79424-

Attn: Nell Green

Report Date: *15-Feb-01*

Phone: (800) 378-1296 **Ext:**
FAX: (806) 794-1298

Our Lab #: 020201012
Date Logged-In: 2/2/01
Matrix: Water
Project #: HELSTF Chrom

Your Sample ID: 0143-HMW36-0101-164117
Sample Source: Groundwater Monitoring
Client Project #:
PO#: 700A21
Date Submitted to Lab: 2/2/2001

- COLLECTION INFORMATION -

Date/Time/By: 1/31/01 11:10 AM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
NH4CLO4	314.0	Ammonium Perchlorate, aq	< 29.5	ug/L	2/8/01	JMN	2850

End of Report

Report Approved By: R Mosher

Arizona Lab License No. AZ0009

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- QUALITY CONTROL REPORT -

Printed: 2/15/2001

WS#	Lab#	Test ID	QC Code	Result	Units	True Added	-- QC Calculations -- QC1	-- QC Calculations -- QC2	Lower Limit	Upper Limit
2850	020101008M	PER	M	23.5	ug/L	25	94 %R:	3 %RPD	80	120
2850	020101008S	PER	S	22.7	ug/L	25	91 %R:		80	120
2852	020601003M	PER	M	24.5	ug/L	25	98 %R:	%RPD	80	120
2852	020601003S	PER	S	24.4	ug/L	25	98 %R:		80	120
2850	Blank	PER	B	0.00	ug/L	0				
2852	Blank	PER	B	0.00	ug/L	0				
2850	Calib Check	PER	K	19.1	ug/L	20	96 %R:		85	115
2852	Calib Check	PER	K	19.2	ug/L	20	96 %R:		85	115
2850	Calib Check	PER	K	5.15	ug/L	5	103 %R:		75	125
2852	Calib Check	PER	K	5.69	ug/L	5	114 %R:		75	125
2850	Calib Check	PER	K	99.0	ug/L	100	99 %R:		85	115
2852	Calib Check	PER	K	99.6	ug/L	100	100 %R:		85	115
2850	Control	PER	C	24.5	ug/L	25	98 %R:		85	115
2852	Control	PER	C	24.6	ug/L	25	98 %R:		85	115
2850	LCS	PER	C	22.0	ug/L	25	88 %R:		80	120
2852	LCS	PER	C	24.0	ug/L	25	96 %R:		80	120

QC Code Legend

B	Blanks	K	Calibration Checks	S	Spikes
C	Control Samples	M	Matrix Spike Duplicates		
D	Duplicates	R	Surrogates		

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Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I2565
TraceAnalysis, Inc.
6701 Aberdeen Ave, Suite 9
Lubbock, TX 79424-

Attn: Nell Green

Report Date: *15-Feb-01*

Phone: (800) 378-1296 **Ext:**
FAX: (806) 794-1298

Our Lab #: 020201014
Date Logged-In: 2/2/01
Matrix: Water
Project #: HELSTF Chrom

Your Sample ID: 0143-HMW39-0101-QC-164119
Sample Source: Groundwater Monitoring
Client Project #:
PO#: 700A21
Date Submitted to Lab: 2/2/2001

- COLLECTION INFORMATION -

Date/Time/By: 1/31/01 11:57 AM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
NH4CLO4	314.0	Ammonium Perchlorate, aq	< 59.1	ug/L	2/8/01	JMN	2850

End of Report

Report Approved By: R Mosher

Arizona Lab License No. AZ0009

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Aqua Tech Environmental Laboratories, Inc.

- QUALITY CONTROL REPORT -

Printed: 2/15/2001

WS#	Lab#	Test ID	QC Code	Result	Units	True Added	-- QC Calculations -- QC1	-- QC Calculations -- QC2	Lower Limit	Upper Limit
2850	020101008M	PER	M	23.5	ug/L	25	94 %R:	3 %RPD	80	120
2850	020101008S	PER	S	22.7	ug/L	25	91 %R:		80	120
2852	020601003M	PER	M	24.5	ug/L	25	98 %R:	%RPD	80	120
2852	020601003S	PER	S	24.4	ug/L	25	98 %R:		80	120
2850	Blank	PER	B	0.00	ug/L	0				
2852	Blank	PER	B	0.00	ug/L	0				
2850	Calib Check	PER	K	19.1	ug/L	20	96 %R:		85	115
2852	Calib Check	PER	K	19.2	ug/L	20	96 %R:		85	115
2850	Calib Check	PER	K	5.15	ug/L	5	103 %R:		75	125
2852	Calib Check	PER	K	5.69	ug/L	5	114 %R:		75	125
2850	Calib Check	PER	K	99.0	ug/L	100	99 %R:		85	115
2852	Calib Check	PER	K	99.6	ug/L	100	100 %R:		85	115
2850	Control	PER	C	24.5	ug/L	25	98 %R:		85	115
2852	Control	PER	C	24.6	ug/L	25	98 %R:		85	115
2850	LCS	PER	C	22.0	ug/L	25	88 %R:		80	120
2852	LCS	PER	C	24.0	ug/L	25	96 %R:		80	120

QC Code Legend

B	Blanks	K	Calibration Checks	S	Spikes
C	Control Samples	M	Matrix Spike Duplicates		
D	Duplicates	R	Surrogates		

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Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I2565 **Report Date:** *15-Feb-01*

TraceAnalysis, Inc.
6701 Aberdeen Ave, Suite 9
Lubbock, TX 79424-

Phone: (800) 378-1296 **Ext:**

Attn: Nell Green **FAX:** (806) 794-1298

Our Lab #: 020201015 **Your Sample ID:** 0143-HMW40-0101-164121
Date Logged-In: 2/2/01 **Sample Source:** Groundwater Monitoring
Matrix: Water **Client Project #:** **PO#:** 700A21
Project #: HELSTF Chrom **Date Submitted to Lab:** 2/2/2001

- COLLECTION INFORMATION -

Date/Time/By: 1/31/01 1:12 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
NH4CLO4	314.0	Ammonium Perchlorate, aq	< 118	ug/L	2/14/01	JMN	2852

End of Report

Report Approved By: R Mosher

Arizona Lab License No. AZ0009

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Aqua Tech Environmental Laboratories, Inc.

- QUALITY CONTROL REPORT -

Printed: 2/15/2001

WS#	Lab#	Test ID	QC Code	Result	Units	True Added	-- QC Calculations -- QC1	-- QC Calculations -- QC2	Lower Limit	Upper Limit
2850	020101008M	PER	M	23.5	ug/L	25	94 %R:	3 %RPD	80	120
2850	020101008S	PER	S	22.7	ug/L	25	91 %R:		80	120
2852	020601003M	PER	M	24.5	ug/L	25	98 %R:	%RPD	80	120
2852	020601003S	PER	S	24.4	ug/L	25	98 %R:		80	120
2850	Blank	PER	B	0.00	ug/L	0				
2852	Blank	PER	B	0.00	ug/L	0				
2850	Calib Check	PER	K	19.1	ug/L	20	96 %R:		85	115
2852	Calib Check	PER	K	19.2	ug/L	20	96 %R:		85	115
2850	Calib Check	PER	K	5.15	ug/L	5	103 %R:		75	125
2852	Calib Check	PER	K	5.69	ug/L	5	114 %R:		75	125
2850	Calib Check	PER	K	99.0	ug/L	100	99 %R:		85	115
2852	Calib Check	PER	K	99.6	ug/L	100	100 %R:		85	115
2850	Control	PER	C	24.5	ug/L	25	98 %R:		85	115
2852	Control	PER	C	24.6	ug/L	25	98 %R:		85	115
2850	LCS	PER	C	22.0	ug/L	25	88 %R:		80	120
2852	LCS	PER	C	24.0	ug/L	25	96 %R:		80	120

QC Code Legend

B	Blanks	K	Calibration Checks	S	Spikes
C	Control Samples	M	Matrix Spike Duplicates		
D	Duplicates	R	Surrogates		

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PHONE 520-573-6565 • 1-800-879-2835 • FAX 520-573-6550

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Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I2565 **Report Date:** *15-Feb-01*

TraceAnalysis, Inc.
6701 Aberdeen Ave, Suite 9
Lubbock, TX 79424-

Phone: (800) 378-1296 **Ext:**

Attn: Nell Green **FAX:** (806) 794-1298

Our Lab #: 020201016 **Your Sample ID:** 0143-HMW41-0101-164123
Date Logged-In: 2/2/01 **Sample Source:** Groundwater Monitoring
Matrix: Water **Client Project #:** **PO#:** 700A21
Project #: HELSTF Chrom **Date Submitted to Lab:** 2/2/2001

- COLLECTION INFORMATION -

Date/Time/By: 1/31/01 12:20 PM

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
NH4CLO4	314.0	Ammonium Perchlorate, aq	< 59.1	ug/L	2/14/01	JMN	2852

End of Report

Report Approved By: R Mosher

Arizona Lab License No. AZ0009

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PHONE 520-573-6565 • 1-800-879-2835 • FAX 520-573-6550

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Aqua Tech Environmental Laboratories, Inc.

- QUALITY CONTROL REPORT -

Printed: 2/15/2001

WS#	Lab#	Test ID	QC Code	Result	Units	True Added	-- QC Calculations -- QC1	-- QC Calculations -- QC2	Lower Limit	Upper Limit
2850	020101008M	PER	M	23.5	ug/L	25	94 %R:	3 %RPD	80	120
2850	020101008S	PER	S	22.7	ug/L	25	91 %R:		80	120
2852	020601003M	PER	M	24.5	ug/L	25	98 %R:	%RPD	80	120
2852	020601003S	PER	S	24.4	ug/L	25	98 %R:		80	120
2850	Blank	PER	B	0.00	ug/L	0				
2852	Blank	PER	B	0.00	ug/L	0				
2850	Calib Check	PER	K	19.1	ug/L	20	96 %R:		85	115
2852	Calib Check	PER	K	19.2	ug/L	20	96 %R:		85	115
2850	Calib Check	PER	K	5.15	ug/L	5	103 %R:		75	125
2852	Calib Check	PER	K	5.69	ug/L	5	114 %R:		75	125
2850	Calib Check	PER	K	99.0	ug/L	100	99 %R:		85	115
2852	Calib Check	PER	K	99.6	ug/L	100	100 %R:		85	115
2850	Control	PER	C	24.5	ug/L	25	98 %R:		85	115
2852	Control	PER	C	24.6	ug/L	25	98 %R:		85	115
2850	LCS	PER	C	22.0	ug/L	25	88 %R:		80	120
2852	LCS	PER	C	24.0	ug/L	25	96 %R:		80	120

QC Code Legend

B	Blanks	K	Calibration Checks	S	Spikes
C	Control Samples	M	Matrix Spike Duplicates		
D	Duplicates	R	Surrogates		

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PHONE 520-573-6565 • 1-800-879-2835 • FAX 520-573-6550

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Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I2565 **Report Date:** *13-Feb-01*

Trace Analysis
6701 Aberdeen
Suite 9
Lubbock, TX 79424-

Phone: (806) 794-1296 **Ext:**
FAX: (806) 794-1298

Attn: Nell Green

Our Lab#: MEL01-01243 **Your Sample ID:** 0143-HMW13-0101-QC-163945
Date Logged In: 1/31/01 **Sample Source:** RCRA
Sample Type: Water **Client Project #:**
Project #: **Date Submitted to Lab:** 1/31/2001 **PO#:** 700A21

- COLLECTION INFORMATION -

Date/Time/By: 1/29/01 12:35 PM

EPA Method	Analyst	Prep Date	Analysis Date
8151	DAW	2/1/00	2/7/01

CAS Number	Parameter	Result	Typical Report Limit
75-99-0	Dalapon	< 1.0 ug/l	1
94-82-6	2,4-DB	< 0.20 ug/l	0.2
1918-00-9	Dicamba	< 0.20 ug/l	0.2
94-75-7	2,4-Dichlorophenoxyacetic acid (2,4-D)	< 0.20 ug/l	0.2
120-36-5	Dichloroprop	< 0.20 ug/l	0.2
88-85-7	Dinoseb	< 0.20 ug/l	0.2
94-74-6	MCPA	< 10 ug/l	10
7085-19-0	MCPP	< 10 ug/l	10
93-72-1	Silvex	< 0.20 ug/l	0.2
93-76-5	2,4,5-T	< 0.20 ug/l	0.2

--- Surrogate Recoveries ---

QC Lab#	EPA Method	Surrogate Name	Percent Recovery	Lower Limit	Upper Limit
MEL01-01243	8151	DCAA (Surr)	123 %R	19	146

End of Report

Report Approved By: Wade T. DeLong

Wade T. DeLong

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Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I2565 **Report Date:** *13-Feb-01*

Trace Analysis
6701 Aberdeen
Suite 9
Lubbock, TX 79424-

Phone: (806) 794-1296 **Ext:**
FAX: (806) 794-1298

Attn: Nell Green

Our Lab#: MEL01-01241 **Your Sample ID:** 0143-HMW11-0101-163947
Date Logged In: 1/31/01 **Sample Source:** RCRA
Sample Type: Water **Client Project #:**
Project #: **Date Submitted to Lab:** 1/31/2001 **PO#:** 700A21

- COLLECTION INFORMATION -

Date/Time/By: 1/29/01 10:29 AM

EPA Method	Analyst	Prep Date	Analysis Date
8151	DAW	2/1/00	2/7/01

CAS Number	Parameter	Result	Typical Report Limit
75-99-0	Dalapon	< 1.0 ug/l	1
94-82-6	2,4-DB	< 0.20 ug/l	0.2
1918-00-9	Dicamba	< 0.20 ug/l	0.2
94-75-7	2,4-Dichlorophenoxyacetic acid (2,4-D)	< 0.20 ug/l	0.2
120-36-5	Dichloroprop	< 0.20 ug/l	0.2
88-85-7	Dinoseb	< 0.20 ug/l	0.2
94-74-6	MCPA	< 10 ug/l	10
7085-19-0	MCPP	< 10 ug/l	10
93-72-1	Silvex	< 0.20 ug/l	0.2
93-76-5	2,4,5-T	< 0.20 ug/l	0.2

--- Surrogate Recoveries ---

QC Lab#	EPA Method	Surrogate Name	Percent Recovery	Lower Limit	Upper Limit
MEL01-01241	8151	DCAA (Surr)	102 %R	19	146

End of Report

Report Approved By: Wade T. DeLong

Wade T. DeLong

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Client #: I2565 **Report Date:** *13-Feb-01*

Trace Analysis
6701 Aberdeen
Suite 9
Lubbock, TX 79424-

Phone: (806) 794-1296 **Ext:**
FAX: (806) 794-1298

Attn: Nell Green

Our Lab#: MEL01-01244 **Your Sample ID:** 0143-HMW43-0101-163949
Date Logged In: 1/31/01 **Sample Source:** RCRA
Sample Type: Water **Client Project #:**
Project #: **Date Submitted to Lab:** 1/31/2001 **PO#:** 700A21

- COLLECTION INFORMATION -

Date/Time/By: 1/29/01 2:02 PM

EPA Method	Analyst	Prep Date	Analysis Date
8151	DAW	2/1/00	2/7/01

CAS Number	Parameter	Result	Typical Report Limit
75-99-0	Dalapon	< 1.0 ug/l	1
94-82-6	2,4-DB	< 0.20 ug/l	0.2
1918-00-9	Dicamba	< 0.20 ug/l	0.2
94-75-7	2,4-Dichlorophenoxyacetic acid (2,4-D)	< 0.20 ug/l	0.2
120-36-5	Dichloroprop	< 0.20 ug/l	0.2
88-85-7	Dinoseb	< 0.20 ug/l	0.2
94-74-6	MCPA	< 10 ug/l	10
7085-19-0	MCPP	< 10 ug/l	10
93-72-1	Silvex	< 0.20 ug/l	0.2
93-76-5	2,4,5-T	< 0.20 ug/l	0.2

--- Surrogate Recoveries ---

QC Lab#	EPA Method	Surrogate Name	Percent Recovery	Lower Limit	Upper Limit
MEL01-01244	8151	DCAA (Surr)	76 %R	19	146

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Report Approved By: Wade T. DeLong

Wade T. DeLong

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Client #: I2565 **Report Date:** *13-Feb-01*

Trace Analysis
6701 Aberdeen
Suite 9
Lubbock, TX 79424-

Phone: (806) 794-1296 **Ext:**
FAX: (806) 794-1298

Attn: Nell Green

Our Lab#: MEL01-01242 **Your Sample ID:** 0143-HMW13-0101-163951
Date Logged In: 1/31/01 **Sample Source:** RCRA
Sample Type: Water **Client Project #:**
Project #: **Date Submitted to Lab:** 1/31/2001 **PO#:** 700A21

- COLLECTION INFORMATION -

Date/Time/By: 1/29/01 12:35 PM

EPA Method	Analyst	Prep Date	Analysis Date
8151	DAW	2/1/00	2/7/01

CAS Number	Parameter	Result	Typical Report Limit
75-99-0	Dalapon	< 1.0 ug/l	1
94-82-6	2,4-DB	< 0.20 ug/l	0.2
1918-00-9	Dicamba	< 0.20 ug/l	0.2
94-75-7	2,4-Dichlorophenoxyacetic acid (2,4-D)	< 0.20 ug/l	0.2
120-36-5	Dichloroprop	< 0.20 ug/l	0.2
88-85-7	Dinoseb	< 0.20 ug/l	0.2
94-74-6	MCPA	< 10 ug/l	10
7085-19-0	MCPP	< 10 ug/l	10
93-72-1	Silvex	< 0.20 ug/l	0.2
93-76-5	2,4,5-T	< 0.20 ug/l	0.2

--- Surrogate Recoveries ---

QC Lab#	EPA Method	Surrogate Name	Percent Recovery	Lower Limit	Upper Limit
MEL01-01242	8151	DCAA (Surr)	90 %R	19	146

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Wade T. DeLong

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Client #: I2565 **Report Date:** *13-Feb-01*

Trace Analysis
6701 Aberdeen
Suite 9
Lubbock, TX 79424-

Phone: (806) 794-1296 **Ext:**
FAX: (806) 794-1298

Attn: Nell Green

Our Lab#: MEL01-01329 **Your Sample ID:** 0143-HMW38-0101-164014
Date Logged In: 2/1/01 **Sample Source:** SDWA/WTP's
Sample Type: Water **Client Project #:**
Project #: **Date Submitted to Lab:** 2/1/2001 **PO#:** 700A21

- COLLECTION INFORMATION -

Date/Time/By: 1/30/01 11:28 AM

EPA Method	Analyst	Prep Date	Analysis Date
8151	DAW	2/1/00	2/7/01

CAS Number	Parameter	Result	Typical Report Limit
75-99-0	Dalapon	< 1.0 ug/l	1
94-82-6	2,4-DB	< 0.20 ug/l	0.2
1918-00-9	Dicamba	< 0.20 ug/l	0.2
94-75-7	2,4-Dichlorophenoxyacetic acid (2,4-D)	< 0.20 ug/l	0.2
120-36-5	Dichloroprop	< 0.20 ug/l	0.2
88-85-7	Dinoseb	< 0.20 ug/l	0.2
94-74-6	MCPA	< 10 ug/l	10
7085-19-0	MCPP	< 10 ug/l	10
93-72-1	Silvex	< 0.20 ug/l	0.2
93-76-5	2,4,5-T	< 0.20 ug/l	0.2

--- Surrogate Recoveries ---

QC Lab#	EPA Method	Surrogate Name	Percent Recovery	Lower Limit	Upper Limit
MEL01-01329	8151	DCAA (Surr)	82 %R	19	146

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Report Approved By: Wade T. DeLong

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Client #: I2565 **Report Date:** *13-Feb-01*

Trace Analysis
6701 Aberdeen
Suite 9
Lubbock, TX 79424-

Phone: (806) 794-1296 **Ext:**
FAX: (806) 794-1298

Attn: Nell Green

Our Lab#: MEL01-01330 **Your Sample ID:** 0143-HMW37-0101-164016
Date Logged In: 2/1/01 **Sample Source:** SDWA/WTP's
Sample Type: Water **Client Project #:**
Project #: **Date Submitted to Lab:** 2/1/2001 **PO#:** 700A21

- COLLECTION INFORMATION -

Date/Time/By: 1/30/01 12:00 PM

EPA Method	Analyst	Prep Date	Analysis Date
8151	DAW	2/1/00	2/7/01

CAS Number	Parameter	Result	Typical Report Limit
75-99-0	Dalapon	< 1.0 ug/l	1
94-82-6	2,4-DB	< 0.20 ug/l	0.2
1918-00-9	Dicamba	< 0.20 ug/l	0.2
94-75-7	2,4-Dichlorophenoxyacetic acid (2,4-D)	< 0.20 ug/l	0.2
120-36-5	Dichloroprop	< 0.20 ug/l	0.2
88-85-7	Dinoseb	< 0.20 ug/l	0.2
94-74-6	MCPA	< 10 ug/l	10
7085-19-0	MCPP	< 10 ug/l	10
93-72-1	Silvex	< 0.20 ug/l	0.2
93-76-5	2,4,5-T	< 0.20 ug/l	0.2

--- Surrogate Recoveries ---

QC Lab#	EPA Method	Surrogate Name	Percent Recovery	Lower Limit	Upper Limit
MEL01-01330	8151	DCAA (Surr)	106 %R	19	146

End of Report

Report Approved By: Wade T. DeLong

Wade T. DeLong

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Client #: I2565 **Report Date:** *13-Feb-01*

Trace Analysis
6701 Aberdeen
Suite 9
Lubbock, TX 79424-

Phone: (806) 794-1296 **Ext:**
FAX: (806) 794-1298

Attn: Nell Green

Our Lab#: MEL01-01387 **Your Sample ID:** 0143-HMW39-0101-164115
Date Logged In: 2/3/01 **Sample Source:** RCRA
Sample Type: Water **Client Project #:**
Project #: **Date Submitted to Lab:** 2/2/2001 **PO#:** 700A21

- COLLECTION INFORMATION -

Date/Time/By: 1/31/01 11:57 AM

EPA Method	Analyst	Prep Date	Analysis Date
8151	DAW	2/5/01	2/8/01

CAS Number	Parameter	Result	Typical Report Limit
75-99-0	Dalapon	< 1.0 ug/l	1
94-82-6	2,4-DB	< 0.20 ug/l	0.2
1918-00-9	Dicamba	< 0.20 ug/l	0.2
94-75-7	2,4-Dichlorophenoxyacetic acid (2,4-D)	< 0.20 ug/l	0.2
120-36-5	Dichloroprop	< 0.20 ug/l	0.2
88-85-7	Dinoseb	< 0.20 ug/l	0.2
94-74-6	MCPA	< 10 ug/l	10
7085-19-0	MCPP	< 10 ug/l	10
93-72-1	Silvex	< 0.20 ug/l	0.2
93-76-5	2,4,5-T	< 0.20 ug/l	0.2

--- Surrogate Recoveries ---

QC Lab#	EPA Method	Surrogate Name	Percent Recovery	Lower Limit	Upper Limit
MEL01-01387	8151	DCAA (Surr)	96 %R	19	146

End of Report

Report Approved By: Wade T. DeLong

Wade T. DeLong

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Client #: I2565 **Report Date:** *13-Feb-01*

Trace Analysis
6701 Aberdeen
Suite 9
Lubbock, TX 79424-

Phone: (806) 794-1296 **Ext:**
FAX: (806) 794-1298

Attn: Nell Green

Our Lab#: MEL01-01386 **Your Sample ID:** 0143-HMW36-0101-164117
Date Logged In: 2/3/01 **Sample Source:** RCRA
Sample Type: Water **Client Project #:**
Project #: **Date Submitted to Lab:** 2/2/2001 **PO#:** 700A21

- COLLECTION INFORMATION -

Date/Time/By: 1/31/01 11:10 AM

EPA Method	Analyst	Prep Date	Analysis Date
8151	DAW	2/5/01	2/8/01

CAS Number	Parameter	Result	Typical Report Limit
75-99-0	Dalapon	< 1.0 ug/l	1
94-82-6	2,4-DB	< 0.20 ug/l	0.2
1918-00-9	Dicamba	< 0.20 ug/l	0.2
94-75-7	2,4-Dichlorophenoxyacetic acid (2,4-D)	< 0.20 ug/l	0.2
120-36-5	Dichloroprop	< 0.20 ug/l	0.2
88-85-7	Dinoseb	< 0.20 ug/l	0.2
94-74-6	MCPA	< 10 ug/l	10
7085-19-0	MCPP	< 10 ug/l	10
93-72-1	Silvex	< 0.20 ug/l	0.2
93-76-5	2,4,5-T	< 0.20 ug/l	0.2

--- Surrogate Recoveries ---

QC Lab#	EPA Method	Surrogate Name	Percent Recovery	Lower Limit	Upper Limit
MEL01-01386	8151	DCAA (Surr)	78 %R	19	146

End of Report

Report Approved By: Wade T. DeLong

Wade T. DeLong

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Client #: I2565 **Report Date:** *13-Feb-01*

Trace Analysis
6701 Aberdeen
Suite 9
Lubbock, TX 79424-

Phone: (806) 794-1296 **Ext:**
FAX: (806) 794-1298

Attn: Nell Green

Our Lab#: MEL01-01388 **Your Sample ID:** 0143-HMW39-0101QC-164119
Date Logged In: 2/3/01 **Sample Source:** RCRA
Sample Type: Water **Client Project #:**
Project #: **Date Submitted to Lab:** 2/2/2001 **PO#:** 700A21

- COLLECTION INFORMATION -

Date/Time/By: 1/31/01 11:57 AM

EPA Method	Analyst	Prep Date	Analysis Date
8151	DAW	2/5/01	2/8/01

CAS Number	Parameter	Result	Typical Report Limit
75-99-0	Dalapon	< 1.0 ug/l	1
94-82-6	2,4-DB	< 0.20 ug/l	0.2
1918-00-9	Dicamba	< 0.20 ug/l	0.2
94-75-7	2,4-Dichlorophenoxyacetic acid (2,4-D)	< 0.20 ug/l	0.2
120-36-5	Dichloroprop	< 0.20 ug/l	0.2
88-85-7	Dinoseb	< 0.20 ug/l	0.2
94-74-6	MCPA	< 10 ug/l	10
7085-19-0	MCPP	< 10 ug/l	10
93-72-1	Silvex	< 0.20 ug/l	0.2
93-76-5	2,4,5-T	< 0.20 ug/l	0.2

--- Surrogate Recoveries ---

QC Lab#	EPA Method	Surrogate Name	Percent Recovery	Lower Limit	Upper Limit
MEL01-01388	8151	DCAA (Surr)	112 %R	19	146

End of Report

Report Approved By: Wade T. DeLong

Wade T. DeLong

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Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I2565 **Report Date:** *16-Feb-01*

Trace Analysis
6701 Aberdeen
Suite 9
Lubbock, TX 79424-

Phone: (806) 794-1296 **Ext:**
FAX: (806) 794-1298

Attn: Nell Green

Our Lab#: MEL01-01487 **Your Sample ID:** 164121
Date Logged In: 2/7/01 **Sample Source:** SDWA/WTP's
Sample Type: Water **Client Project #:**
Project #: **Date Submitted to Lab:** 2/6/2001 **PO#:**

- COLLECTION INFORMATION -

Date/Time/By: 1/31/01

EPA Method	Analyst	Prep Date	Analysis Date
8151	DAW	2/7/01	2/11/01

CAS Number	Parameter	Result	Typical Report Limit
75-99-0	Dalapon	< 1.0 ug/l	1
94-82-6	2,4-DB	< 0.20 ug/l	0.2
1918-00-9	Dicamba	< 0.20 ug/l	0.2
94-75-7	2,4-Dichlorophenoxyacetic acid (2,4-D)	< 0.20 ug/l	0.2
120-36-5	Dichloroprop	< 0.20 ug/l	0.2
88-85-7	Dinoseb	< 0.20 ug/l	0.2
94-74-6	MCPA	< 10 ug/l	10
7085-19-0	MCPP	< 10 ug/l	10
93-72-1	Silvex	< 0.20 ug/l	0.2
93-76-5	2,4,5-T	< 0.20 ug/l	0.2

--- Surrogate Recoveries ---

QC Lab#	EPA Method	Surrogate Name	Percent Recovery	Lower Limit	Upper Limit
MEL01-01487	8151	DCAA (Surr)	113 %R	19	146

End of Report

Report Approved By: Wade T. DeLong

Wade T. DeLong

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Client #: I2565 **Report Date:** *16-Feb-01*

Trace Analysis
6701 Aberdeen
Suite 9
Lubbock, TX 79424-

Phone: (806) 794-1296 **Ext:**
FAX: (806) 794-1298

Attn: Nell Green

Our Lab#: MEL01-01488 **Your Sample ID:** 164123
Date Logged In: 2/7/01 **Sample Source:** SDWA/WTP's
Sample Type: Water **Client Project #:**
Project #: **Date Submitted to Lab:** 2/6/2001 **PO#:**

- COLLECTION INFORMATION -

Date/Time/By: 1/31/01

EPA Method	Analyst	Prep Date	Analysis Date
8151	DAW	2/7/01	2/11/01

CAS Number	Parameter	Result	Typical Report Limit
75-99-0	Dalapon	< 1.0 ug/l	1
94-82-6	2,4-DB	< 0.20 ug/l	0.2
1918-00-9	Dicamba	< 0.20 ug/l	0.2
94-75-7	2,4-Dichlorophenoxyacetic acid (2,4-D)	< 0.20 ug/l	0.2
120-36-5	Dichloroprop	< 0.20 ug/l	0.2
88-85-7	Dinoseb	< 0.20 ug/l	0.2
94-74-6	MCPA	< 10 ug/l	10
7085-19-0	MCPP	< 10 ug/l	10
93-72-1	Silvex	< 0.20 ug/l	0.2
93-76-5	2,4,5-T	< 0.20 ug/l	0.2

--- Surrogate Recoveries ---

QC Lab#	EPA Method	Surrogate Name	Percent Recovery	Lower Limit	Upper Limit
MEL01-01488	8151	DCAA (Surr)	112 %R	19	146

End of Report

Report Approved By: Wade T. DeLong

Wade T. DeLong

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Aqua Tech Environmental Laboratories, Inc.

MAR 2 8 2001

MEVATEC CORP. DIVISION

- CERTIFICATE OF ANALYSIS -

Client #: I2565
Trace Analysis
6701 Aberdeen Suite 9
Lubbock, TX 79424-

Report Date: *20-Mar-01*

Phone: (806) 794-1296 **Ext:**
FAX: (806) 794-1298

Attn: Nell Green

Our Lab #: MAR01-05426 **Your Sample ID:** 163945 HMW 13-QC

Date Logged-In: 3/12/01 **Sample Source:** NPDES/WWTP's

Matrix: WasteWater **Client Project #:** **PO#:** Proj. 700A21

Project #: 700A21 **Date Submitted to Lab:** 3/9/2001

- COLLECTION INFORMATION -

Date/Time/By: 1/29/01

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
AL-ICP	200.7/6010B	Aluminum, Al	940 (500)	UG/L	3/13/01	BLD	24969
AS-MS	200.8/6020	Arsenic, As	15 (3.0)	UG/L	3/13/01	KRG	24971
BA-ICP	200.7/6010B	Barium, Ba	ND (50)	UG/L	3/13/01	BLD	24969
BE-MS	200.8/6020	Beryllium, Be	ND (1.0)	UG/L	3/13/01	KRG	24971
B-MS	200.8/6020	Boron, B	3900 (500)	UG/L	3/13/01	KRG	24971
CD-MS	200.8/6020	Cadmium, Cd	ND (5.0)	UG/L	3/13/01	KRG	24971
CA-ICP	200.7/6010B	Calcium, Ca	400 (0.5)	MG/L	3/13/01	BLD	24969
CR-ICP	200.7/6010B	Chromium, Cr	ND (100)	UG/L	3/13/01	BLD	24969
CO-ICP	200.7/6010B	Cobalt, Co	ND (50)	UG/L	3/13/01	BLD	24969
CU-ICP	200.7/6010B	Copper, Cu	140 (100)	UG/L	3/13/01	BLD	24969
FE-ICP	200.7/6010B	Iron, Fe	1200 (200)	UG/L	3/13/01	BLD	24969
PB-MS	200.8/6020	Lead, Pb	ND (10)	UG/L	3/12/01	RCM	24951
MG-ICP	200.7/6010B	Magnesium, Mg	350 (0.5)	MG/L	3/13/01	BLD	24969
MN-ICP	200.7/6010B	Manganese, Mn	98 (50)	UG/L	3/13/01	BLD	24969
MO-MS	200.8	Molybdenum, Mo	280 (30)	UG/L	3/13/01	KRG	24971
NI-ICP	200.7/6010B	Nickel, Ni	ND (100)	UG/L	3/13/01	BLD	24969
SE-GFAA	3113B/7740	Selenium, Se	ND (30)	UG/L	3/13/01	ROH	24956
SI-MS	200.8	Silicon, Si	18.6 (0.10)	MG/L	3/13/01	KRG	24971
AG-ICP	200.7/6010B	Silver, Ag	ND (50)	UG/L	3/13/01	BLD	24969
SR-MS	200.8/6020	Strontium, Sr	7500 (25)	UG/L	3/13/01	KRG	24971
V-ICP	200.7/6010B	Vanadium, V	ND (100)	UG/L	3/13/01	BLD	24969
ZN-ICP	200.7/6010B	Zinc, Zn	150 (50)	UG/L	3/13/01	BLD	24969

CERTIFICATIONS: NCDWQ263,NCDEH39700,AZ0071,OH4053,NY11071,A2LA102325

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Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Lab Number MAR01-05426 -Continued from Previous Page

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
SN-GFAA	3113B/7871	Tin, Sn	ND (500)	UG/L	3/13/01	RCM	24980
AS-MS-D	200.8/6020	Arsenic, As, Dissolved	11 (3.0)	UG/L	3/13/01	KRG	24971
BA-ICP-D	200.7/6010B	Barium, Ba, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
BE-MS-D	200.8/6020	Beryllium, Be, Dissolved	ND (1.0)	UG/L	3/13/01	KRG	24971
B-MS-D	200.8/6020	Boron, B, Dissolved	4100 (500)	UG/L	3/13/01	KRG	24971
CD-MS-D	200.8/6020	Cadmium, Cd, Dissolved	ND (5.0)	UG/L	3/13/01	KRG	24971
CA-ICP-D	200.7/6010B	Calcium, Ca, Dissolved	410 (0.5)	MG/L	3/13/01	BLD	24969
CR-ICP-D	200.7/6010B	Chromium, Cr, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
CO-ICP-D	200.7/6010B	Cobalt, Co, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
CU-ICP-D	200.7/6010B	Copper, Cu, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
FE-ICP-D	200.7/6010B	Iron, Fe, Dissolved	398 (200)	UG/L	3/13/01	BLD	24969
PB-MS-D	200.8/6020	Lead, Pb, Dissolved	ND (10)	UG/L	3/12/01	RCM	24951
LI-MS-D	6020	Lithium, Li, Dissolved	280 (100)	UG/L	3/13/01	KRG	24971
MG-ICP-D	200.7/6010B	Magnesium, Mg, Dissolved	360 (0.5)	MG/L	3/13/01	BLD	24969
MN-ICP-D	200.7/6010B	Manganese, Mn, Dissolved	59 (50)	UG/L	3/13/01	BLD	24969
MO-MS-D	200.8	Molybdenum, Mo, Dissolved	270 (30)	UG/L	3/13/01	KRG	24971
NI-ICP-D	200.7/6010B	Nickel, Ni, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
SE-GFAA-D	3113B/7740	Selenium, Se, Dissolved	ND (30)	UG/L	3/12/01	ROH	24950
SI-MS-D	200.8/6020	Silicon, Si, Dissolved	13.8 (0.2)	MG/L	3/13/01	KRG	24971
AG-ICP-D	200.7/6010B	Silver, Ag, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
SR-MS-D	6020	Strontium, Sr, Dissolved	7800 (10)	UG/L	3/13/01	KRG	24971
SN-GFAA-D	3113B/7871	Tin, Sn, Dissolved	ND (500)	UG/L	3/14/01	SMM	24994
V-ICP-D	200.7/6010B	Vanadium, V, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
ZN-ICP-D	200.7/6010B	Zinc, Zn, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
AL-ICP-D	200.7/6010B	Aluminum, Al, Dissolved	ND (500)	UG/L	3/13/01	BLD	24969
P	SM4500-P-E2	Phosphorus, P	0.30 (0.02)	MG/L	3/13/01	JA/BS	24958

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Note: The data is valid although the BATCH matrix spike result associated with phosphorus was outside the recommended limits.The result for the Selenium analytical bench spike was biased low and thus the sample result should be qualified due to a matrix effect. The analytical run was not rejected since the method quality control checks were within limits.

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

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ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I2565
Trace Analysis
6701 Aberdeen Suite 9
Lubbock, TX 79424-

Report Date: *20-Mar-01*

Phone: (806) 794-1296 **Ext:**
FAX: (806) 794-1298

Attn: Nell Green

Our Lab #: MAR01-05427 **Your Sample ID:** 163947 HMW-11
Date Logged-In: 3/12/01 **Sample Source:** NPDES/WWTP's
Matrix: WasteWater **Client Project #:** **PO#:** Proj. 700A21
Project #: 700A21 **Date Submitted to Lab:** 3/9/2001

- COLLECTION INFORMATION -

Date/Time/By: 1/29/01

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
AL-ICP	200.7/6010B	Aluminum, Al	1300 (500)	UG/L	3/13/01	BLD	24969
AS-MS	200.8/6020	Arsenic, As	31 (3.0)	UG/L	3/13/01	KRG	24971
BA-ICP	200.7/6010B	Barium, Ba	ND (50)	UG/L	3/13/01	BLD	24969
BE-MS	200.8/6020	Beryllium, Be	ND (1.0)	UG/L	3/13/01	KRG	24971
B-MS	200.8/6020	Boron, B	5000 (500)	UG/L	3/13/01	KRG	24971
CD-MS	200.8/6020	Cadmium, Cd	ND (5.0)	UG/L	3/13/01	KRG	24971
CA-ICP	200.7/6010B	Calcium, Ca	360 (0.5)	MG/L	3/13/01	BLD	24969
CR-ICP	200.7/6010B	Chromium, Cr	240 (100)	UG/L	3/13/01	BLD	24969
CO-ICP	200.7/6010B	Cobalt, Co	ND (50)	UG/L	3/13/01	BLD	24969
CU-ICP	200.7/6010B	Copper, Cu	ND (100)	UG/L	3/13/01	BLD	24969
FE-ICP	200.7/6010B	Iron, Fe	1400 (200)	UG/L	3/13/01	BLD	24969
PB-MS	200.8/6020	Lead, Pb	ND (10)	UG/L	3/12/01	RCM	24951
MG-ICP	200.7/6010B	Magnesium, Mg	890 (0.5)	MG/L	3/13/01	BLD	24969
MN-ICP	200.7/6010B	Manganese, Mn	113 (50)	UG/L	3/13/01	BLD	24969
MO-MS	200.8	Molybdenum, Mo	610 (30)	UG/L	3/13/01	KRG	24971
NI-ICP	200.7/6010B	Nickel, Ni	ND (100)	UG/L	3/13/01	BLD	24969
SE-GFAA	3113B/7740	Selenium, Se	130 (60)	UG/L	3/13/01	ROH	24956
SI-MS	200.8	Silicon, Si	26.6 (0.10)	MG/L	3/13/01	KRG	24971
AG-ICP	200.7/6010B	Silver, Ag	ND (50)	UG/L	3/13/01	BLD	24969
SR-MS	200.8/6020	Strontium, Sr	8100 (25)	UG/L	3/13/01	KRG	24971
V-ICP	200.7/6010B	Vanadium, V	ND (100)	UG/L	3/13/01	BLD	24969
ZN-ICP	200.7/6010B	Zinc, Zn	ND (50)	UG/L	3/13/01	BLD	24969

CERTIFICATIONS: NCDWQ263,NCDEH39700,AZ0071,OH4053,NY11071,A2LA102325

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- CERTIFICATE OF ANALYSIS -

Lab Number MAR01-05427 -Continued from Previous Page

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
SN-GFAA	3113B/7871	Tin, Sn	ND (500)	UG/L	3/13/01	RCM	24980
AS-MS-D	200.8/6020	Arsenic, As, Dissolved	30 (3.0)	UG/L	3/13/01	KRG	24971
BA-ICP-D	200.7/6010B	Barium, Ba, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
BE-MS-D	200.8/6020	Beryllium, Be, Dissolved	ND (1.0)	UG/L	3/13/01	KRG	24971
B-MS-D	200.8/6020	Boron, B, Dissolved	5200 (500)	UG/L	3/13/01	KRG	24971
CD-MS-D	200.8/6020	Cadmium, Cd, Dissolved	ND (5.0)	UG/L	3/13/01	KRG	24971
CA-ICP-D	200.7/6010B	Calcium, Ca, Dissolved	370 (0.5)	MG/L	3/13/01	BLD	24969
CR-ICP-D	200.7/6010B	Chromium, Cr, Dissolved	270 (100)	UG/L	3/13/01	BLD	24969
CO-ICP-D	200.7/6010B	Cobalt, Co, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
CU-ICP-D	200.7/6010B	Copper, Cu, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
FE-ICP-D	200.7/6010B	Iron, Fe, Dissolved	ND (200)	UG/L	3/13/01	BLD	24969
PB-MS-D	200.8/6020	Lead, Pb, Dissolved	ND (10)	UG/L	3/12/01	RCM	24951
LI-MS-D	6020	Lithium, Li, Dissolved	410 (100)	UG/L	3/13/01	KRG	24971
MG-ICP-D	200.7/6010B	Magnesium, Mg, Dissolved	940 (0.5)	MG/L	3/13/01	BLD	24969
MN-ICP-D	200.7/6010B	Manganese, Mn, Dissolved	62 (50)	UG/L	3/13/01	BLD	24969
MO-MS-D	200.8	Molybdenum, Mo, Dissolved	660 (30)	UG/L	3/13/01	KRG	24971
NI-ICP-D	200.7/6010B	Nickel, Ni, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
SE-GFAA-D	3113B/7740	Selenium, Se, Dissolved	110 (60)	UG/L	3/13/01	ROH	24956
SI-MS-D	200.8/6020	Silicon, Si, Dissolved	19.9 (0.2)	MG/L	3/13/01	KRG	24971
AG-ICP-D	200.7/6010B	Silver, Ag, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
SR-MS-D	6020	Strontium, Sr, Dissolved	8500 (10)	UG/L	3/13/01	KRG	24971
SN-GFAA-D	3113B/7871	Tin, Sn, Dissolved	ND (500)	UG/L	3/14/01	SMM	24994
V-ICP-D	200.7/6010B	Vanadium, V, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
ZN-ICP-D	200.7/6010B	Zinc, Zn, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
AL-ICP-D	200.7/6010B	Aluminum, Al, Dissolved	ND (500)	UG/L	3/13/01	BLD	24969
P	SM4500-P-E2	Phosphorus, P	0.27 (0.02)	MG/L	3/13/01	JA/BS	24958

CERTIFICATIONS: NCDWQ263,NCDEH39700,AZ0071,OH4053,NY11071,A2LA102325

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Note: The result for the phosphorus matrix spike was biased high and thus the sample result should be qualified due to a matrix effect. The analytical run was not rejected since the method quality control checks were within limits.The result for the Selenium analytical bench spike was biased low and thus the sample result should be qualified due to a matrix effect. The analytical run was not rejected since the method quality control checks were within limits.

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

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ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I2565

Trace Analysis
6701 Aberdeen Suite 9
Lubbock, TX 79424-

Report Date: *20-Mar-01*

Phone: (806) 794-1296 **Ext:**
FAX: (806) 794-1298

Attn: Nell Green

Our Lab #: MAR01-05428 **Your Sample ID:** 163949 HMW-43

Date Logged-In: 3/12/01 **Sample Source:** NPDES/WWTP's

Matrix: WasteWater **Client Project #:** **PO#:** Proj. 700A21

Project #: 700A21 **Date Submitted to Lab:** 3/9/2001

- COLLECTION INFORMATION -

Date/Time/By: 1/29/01

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
AL-ICP	200.7/6010B	Aluminum, Al	ND (500)	UG/L	3/13/01	BLD	24969
AS-MS	200.8/6020	Arsenic, As	16 (3.0)	UG/L	3/13/01	KRG	24971
BA-ICP	200.7/6010B	Barium, Ba	ND (50)	UG/L	3/13/01	BLD	24969
BE-MS	200.8/6020	Beryllium, Be	ND (1.0)	UG/L	3/13/01	KRG	24971
B-MS	200.8/6020	Boron, B	7800 (500)	UG/L	3/13/01	KRG	24971
CD-MS	200.8/6020	Cadmium, Cd	ND (5.0)	UG/L	3/13/01	KRG	24971
CA-ICP	200.7/6010B	Calcium, Ca	400 (0.5)	MG/L	3/13/01	BLD	24969
CR-ICP	200.7/6010B	Chromium, Cr	ND (100)	UG/L	3/13/01	BLD	24969
CO-ICP	200.7/6010B	Cobalt, Co	ND (50)	UG/L	3/13/01	BLD	24969
CU-ICP	200.7/6010B	Copper, Cu	ND (100)	UG/L	3/13/01	BLD	24969
FE-ICP	200.7/6010B	Iron, Fe	ND (200)	UG/L	3/13/01	BLD	24969
PB-MS	200.8/6020	Lead, Pb	ND (10)	UG/L	3/12/01	RCM	24951
MG-ICP	200.7/6010B	Magnesium, Mg	370 (0.5)	MG/L	3/13/01	BLD	24969
MN-ICP	200.7/6010B	Manganese, Mn	ND (50)	UG/L	3/13/01	BLD	24969
MO-MS	200.8	Molybdenum, Mo	540 (30)	UG/L	3/13/01	KRG	24971
NI-ICP	200.7/6010B	Nickel, Ni	ND (100)	UG/L	3/13/01	BLD	24969
SE-GFAA	3113B/7740	Selenium, Se	ND (30)	UG/L	3/13/01	ROH	24956
SI-MS	200.8	Silicon, Si	20.7 (0.10)	MG/L	3/13/01	KRG	24971
AG-ICP	200.7/6010B	Silver, Ag	ND (50)	UG/L	3/13/01	BLD	24969
SR-MS	200.8/6020	Strontium, Sr	5500 (25)	UG/L	3/13/01	KRG	24971
V-ICP	200.7/6010B	Vanadium, V	ND (100)	UG/L	3/13/01	BLD	24969
ZN-ICP	200.7/6010B	Zinc, Zn	ND (50)	UG/L	3/13/01	BLD	24969

CERTIFICATIONS: NCDWQ263,NCDEH39700,AZ0071,OH4053,NY11071,A2LA102325

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Lab Number MAR01-05428 -Continued from Previous Page

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
SN-GFAA	3113B/7871	Tin, Sn	ND (500)	UG/L	3/13/01	RCM	24980
AS-MS-D	200.8/6020	Arsenic, As, Dissolved	16 (3.0)	UG/L	3/13/01	KRG	24971
BA-ICP-D	200.7/6010B	Barium, Ba, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
BE-MS-D	200.8/6020	Beryllium, Be, Dissolved	ND (1.0)	UG/L	3/13/01	KRG	24971
B-MS-D	200.8/6020	Boron, B, Dissolved	7500 (500)	UG/L	3/13/01	KRG	24971
CD-MS-D	200.8/6020	Cadmium, Cd, Dissolved	ND (5.0)	UG/L	3/13/01	KRG	24971
CA-ICP-D	200.7/6010B	Calcium, Ca, Dissolved	420 (0.5)	MG/L	3/13/01	BLD	24969
CR-ICP-D	200.7/6010B	Chromium, Cr, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
CO-ICP-D	200.7/6010B	Cobalt, Co, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
CU-ICP-D	200.7/6010B	Copper, Cu, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
FE-ICP-D	200.7/6010B	Iron, Fe, Dissolved	ND (200)	UG/L	3/13/01	BLD	24969
PB-MS-D	200.8/6020	Lead, Pb, Dissolved	ND (10)	UG/L	3/12/01	RCM	24951
LI-MS-D	6020	Lithium, Li, Dissolved	270 (100)	UG/L	3/13/01	KRG	24971
MG-ICP-D	200.7/6010B	Magnesium, Mg, Dissolved	390 (0.5)	MG/L	3/13/01	BLD	24969
MN-ICP-D	200.7/6010B	Manganese, Mn, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
MO-MS-D	200.8	Molybdenum, Mo, Dissolved	530 (30)	UG/L	3/13/01	KRG	24971
NI-ICP-D	200.7/6010B	Nickel, Ni, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
SE-GFAA-D	3113B/7740	Selenium, Se, Dissolved	40 (30)	UG/L	3/12/01	ROH	24950
SI-MS-D	200.8/6020	Silicon, Si, Dissolved	19.0 (0.2)	MG/L	3/13/01	KRG	24971
AG-ICP-D	200.7/6010B	Silver, Ag, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
SR-MS-D	6020	Strontium, Sr, Dissolved	5400 (10)	UG/L	3/13/01	KRG	24971
SN-GFAA-D	3113B/7871	Tin, Sn, Dissolved	ND (500)	UG/L	3/14/01	SMM	24994
V-ICP-D	200.7/6010B	Vanadium, V, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
ZN-ICP-D	200.7/6010B	Zinc, Zn, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
AL-ICP-D	200.7/6010B	Aluminum, Al, Dissolved	ND (500)	UG/L	3/13/01	BLD	24969
P	SM4500-P-E2	Phosphorus, P	0.07 (0.02)	MG/L	3/13/01	JA/BS	24958

Note: The result for the Selenium analytical bench spike was biased low and thus the sample result should be qualified due to a matrix effect. The analytical run was not rejected since the method quality control checks were within limits.

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

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ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I2565
Trace Analysis
6701 Aberdeen Suite 9
Lubbock, TX 79424-

Report Date: *20-Mar-01*

Phone: (806) 794-1296 **Ext:**
FAX: (806) 794-1298

Attn: Nell Green

Our Lab #: MAR01-05429 **Your Sample ID:** 163951 HMW-13
Date Logged-In: 3/12/01 **Sample Source:** NPDES/WWTP's
Matrix: WasteWater **Client Project #:** **PO#:** Proj. 700A21
Project #: 700A21 **Date Submitted to Lab:** 3/9/2001

- COLLECTION INFORMATION -

Date/Time/By: 1/29/01

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
AL-ICP	200.7/6010B	Aluminum, Al	ND (500)	UG/L	3/13/01	BLD	24969
AS-MS	200.8/6020	Arsenic, As	13 (3.0)	UG/L	3/13/01	KRG	24971
BA-ICP	200.7/6010B	Barium, Ba	ND (50)	UG/L	3/13/01	BLD	24969
BE-MS	200.8/6020	Beryllium, Be	ND (1.0)	UG/L	3/13/01	KRG	24971
B-MS	200.8/6020	Boron, B	3700 (500)	UG/L	3/13/01	KRG	24971
CD-MS	200.8/6020	Cadmium, Cd	ND (5.0)	UG/L	3/13/01	KRG	24971
CA-ICP	200.7/6010B	Calcium, Ca	380 (0.5)	MG/L	3/13/01	BLD	24969
CR-ICP	200.7/6010B	Chromium, Cr	ND (100)	UG/L	3/13/01	BLD	24969
CO-ICP	200.7/6010B	Cobalt, Co	ND (50)	UG/L	3/13/01	BLD	24969
CU-ICP	200.7/6010B	Copper, Cu	ND (100)	UG/L	3/13/01	BLD	24969
FE-ICP	200.7/6010B	Iron, Fe	440 (200)	UG/L	3/13/01	BLD	24969
PB-MS	200.8/6020	Lead, Pb	ND (10)	UG/L	3/12/01	RCM	24951
MG-ICP	200.7/6010B	Magnesium, Mg	340 (0.5)	MG/L	3/13/01	BLD	24969
MN-ICP	200.7/6010B	Manganese, Mn	67 (50)	UG/L	3/13/01	BLD	24969
MO-MS	200.8	Molybdenum, Mo	280 (30)	UG/L	3/13/01	KRG	24971
NI-ICP	200.7/6010B	Nickel, Ni	ND (100)	UG/L	3/13/01	BLD	24969
SE-GFAA	3113B/7740	Selenium, Se	ND (30)	UG/L	3/13/01	ROH	24956
SI-MS	200.8	Silicon, Si	16.9 (0.10)	MG/L	3/13/01	KRG	24971
AG-ICP	200.7/6010B	Silver, Ag	110 (50)	UG/L	3/13/01	BLD	24969
SR-MS	200.8/6020	Strontium, Sr	7900 (25)	UG/L	3/13/01	KRG	24971
V-ICP	200.7/6010B	Vanadium, V	ND (100)	UG/L	3/13/01	BLD	24969
ZN-ICP	200.7/6010B	Zinc, Zn	ND (50)	UG/L	3/13/01	BLD	24969

CERTIFICATIONS: NCDWQ263,NCDEH39700,AZ0071,OH4053,NY11071,A2LA102325

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Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Lab Number MAR01-05429 -Continued from Previous Page

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
SN-GFAA	3113B/7871	Tin, Sn	ND (500)	UG/L	3/13/01	RCM	24980
AS-MS-D	200.8/6020	Arsenic, As, Dissolved	12 (3.0)	UG/L	3/13/01	KRG	24971
BA-ICP-D	200.7/6010B	Barium, Ba, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
BE-MS-D	200.8/6020	Beryllium, Be, Dissolved	ND (1.0)	UG/L	3/13/01	KRG	24971
B-MS-D	200.8/6020	Boron, B, Dissolved	4000 (500)	UG/L	3/13/01	KRG	24971
CD-MS-D	200.8/6020	Cadmium, Cd, Dissolved	ND (5.0)	UG/L	3/13/01	KRG	24971
CA-ICP-D	200.7/6010B	Calcium, Ca, Dissolved	410 (0.5)	MG/L	3/13/01	BLD	24969
CR-ICP-D	200.7/6010B	Chromium, Cr, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
CO-ICP-D	200.7/6010B	Cobalt, Co, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
CU-ICP-D	200.7/6010B	Copper, Cu, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
FE-ICP-D	200.7/6010B	Iron, Fe, Dissolved	ND (200)	UG/L	3/13/01	BLD	24969
PB-MS-D	200.8/6020	Lead, Pb, Dissolved	ND (10)	UG/L	3/12/01	RCM	24951
LI-MS-D	6020	Lithium, Li, Dissolved	260 (100)	UG/L	3/13/01	KRG	24971
MG-ICP-D	200.7/6010B	Magnesium, Mg, Dissolved	350 (0.5)	MG/L	3/13/01	BLD	24969
MN-ICP-D	200.7/6010B	Manganese, Mn, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
MO-MS-D	200.8	Molybdenum, Mo, Dissolved	270 (30)	UG/L	3/13/01	KRG	24971
NI-ICP-D	200.7/6010B	Nickel, Ni, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
SE-GFAA-D	3113B/7740	Selenium, Se, Dissolved	ND (30)	UG/L	3/12/01	ROH	24950
SI-MS-D	200.8/6020	Silicon, Si, Dissolved	13.9 (0.2)	MG/L	3/13/01	KRG	24971
AG-ICP-D	200.7/6010B	Silver, Ag, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
SR-MS-D	6020	Strontium, Sr, Dissolved	8000 (10)	UG/L	3/13/01	KRG	24971
SN-GFAA-D	3113B/7871	Tin, Sn, Dissolved	ND (500)	UG/L	3/14/01	SMM	24994
V-ICP-D	200.7/6010B	Vanadium, V, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
ZN-ICP-D	200.7/6010B	Zinc, Zn, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
AL-ICP-D	200.7/6010B	Aluminum, Al, Dissolved	ND (500)	UG/L	3/13/01	BLD	24969
P	SM4500-P-E2	Phosphorus, P	0.24 (0.02)	MG/L	3/13/01	JA/BS	24958

Note: The result for the Selenium analytical bench spike was biased low and thus the sample result should be qualified due to a matrix effect. The analytical run was not rejected since the method quality control checks were within limits.

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

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ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I2565 **Report Date:** *20-Mar-01*

Trace Analysis
6701 Aberdeen Suite 9
Lubbock, TX 79424-

Phone: (806) 794-1296 **Ext:**
FAX: (806) 794-1298

Attn: Nell Green

Our Lab #: MAR01-05430 **Your Sample ID:** 164014 HMW-38
Date Logged-In: 3/12/01 **Sample Source:** NPDES/WWTP's
Matrix: WasteWater **Client Project #:** **PO#:** Proj. 700A21
Project #: 700A21 **Date Submitted to Lab:** 3/9/2001

- COLLECTION INFORMATION -

Date/Time/By: 1/30/01

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
AL-ICP	200.7/6010B	Aluminum, Al	ND (500)	UG/L	3/13/01	BLD	24969
AS-MS	200.8/6020	Arsenic, As	30 (3.0)	UG/L	3/13/01	KRG	24971
BA-ICP	200.7/6010B	Barium, Ba	ND (50)	UG/L	3/13/01	BLD	24969
BE-MS	200.8/6020	Beryllium, Be	ND (1.0)	UG/L	3/13/01	KRG	24971
B-MS	200.8/6020	Boron, B	7800 (500)	UG/L	3/13/01	KRG	24971
CD-MS	200.8/6020	Cadmium, Cd	ND (5.0)	UG/L	3/13/01	KRG	24971
CA-ICP	200.7/6010B	Calcium, Ca	330 (0.5)	MG/L	3/13/01	BLD	24969
CR-ICP	200.7/6010B	Chromium, Cr	ND (100)	UG/L	3/13/01	BLD	24969
CO-ICP	200.7/6010B	Cobalt, Co	ND (50)	UG/L	3/13/01	BLD	24969
CU-ICP	200.7/6010B	Copper, Cu	ND (100)	UG/L	3/13/01	BLD	24969
FE-ICP	200.7/6010B	Iron, Fe	ND (200)	UG/L	3/13/01	BLD	24969
PB-MS	200.8/6020	Lead, Pb	ND (10)	UG/L	3/12/01	RCM	24951
MG-ICP	200.7/6010B	Magnesium, Mg	710 (0.5)	MG/L	3/13/01	BLD	24969
MN-ICP	200.7/6010B	Manganese, Mn	57 (50)	UG/L	3/13/01	BLD	24969
MO-MS	200.8	Molybdenum, Mo	970 (30)	UG/L	3/13/01	KRG	24971
NI-ICP	200.7/6010B	Nickel, Ni	ND (100)	UG/L	3/13/01	BLD	24969
SE-GFAA	3113B/7740	Selenium, Se	100 (30)	UG/L	3/13/01	ROH	24956
SI-MS	200.8	Silicon, Si	20.8 (0.10)	MG/L	3/13/01	KRG	24971
AG-ICP	200.7/6010B	Silver, Ag	ND (50)	UG/L	3/13/01	BLD	24969
SR-MS	200.8/6020	Strontium, Sr	6600 (25)	UG/L	3/13/01	KRG	24971
V-ICP	200.7/6010B	Vanadium, V	ND (100)	UG/L	3/13/01	BLD	24969
ZN-ICP	200.7/6010B	Zinc, Zn	73 (50)	UG/L	3/13/01	BLD	24969

CERTIFICATIONS: NCDWQ263,NCDEH39700,AZ0071,OH4053,NY11071,A2LA102325

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- CERTIFICATE OF ANALYSIS -

Lab Number MAR01-05430 -Continued from Previous Page

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
SN-GFAA	3113B/7871	Tin, Sn	ND (500)	UG/L	3/13/01	RCM	24980
AS-MS-D	200.8/6020	Arsenic, As, Dissolved	30 (3.0)	UG/L	3/13/01	KRG	24971
BA-ICP-D	200.7/6010B	Barium, Ba, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
BE-MS-D	200.8/6020	Beryllium, Be, Dissolved	ND (1.0)	UG/L	3/13/01	KRG	24971
B-MS-D	200.8/6020	Boron, B, Dissolved	9100 (500)	UG/L	3/13/01	KRG	24971
CD-MS-D	200.8/6020	Cadmium, Cd, Dissolved	ND (5.0)	UG/L	3/13/01	KRG	24971
CA-ICP-D	200.7/6010B	Calcium, Ca, Dissolved	340 (0.5)	MG/L	3/13/01	BLD	24969
CR-ICP-D	200.7/6010B	Chromium, Cr, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
CO-ICP-D	200.7/6010B	Cobalt, Co, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
CU-ICP-D	200.7/6010B	Copper, Cu, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
FE-ICP-D	200.7/6010B	Iron, Fe, Dissolved	ND (200)	UG/L	3/13/01	BLD	24969
PB-MS-D	200.8/6020	Lead, Pb, Dissolved	ND (10)	UG/L	3/12/01	RCM	24951
LI-MS-D	6020	Lithium, Li, Dissolved	340 (100)	UG/L	3/13/01	KRG	24971
MG-ICP-D	200.7/6010B	Magnesium, Mg, Dissolved	720 (0.5)	MG/L	3/13/01	BLD	24969
MN-ICP-D	200.7/6010B	Manganese, Mn, Dissolved	51 (50)	UG/L	3/13/01	BLD	24969
MO-MS-D	200.8	Molybdenum, Mo, Dissolved	1000 (30)	UG/L	3/13/01	KRG	24971
NI-ICP-D	200.7/6010B	Nickel, Ni, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
SE-GFAA-D	3113B/7740	Selenium, Se, Dissolved	110 (30)	UG/L	3/12/01	ROH	24950
SI-MS-D	200.8/6020	Silicon, Si, Dissolved	21.0 (0.2)	MG/L	3/13/01	KRG	24971
AG-ICP-D	200.7/6010B	Silver, Ag, Dissolved	68 (50)	UG/L	3/13/01	BLD	24969
SR-MS-D	6020	Strontium, Sr, Dissolved	7000 (10)	UG/L	3/13/01	KRG	24971
SN-GFAA-D	3113B/7871	Tin, Sn, Dissolved	ND (500)	UG/L	3/14/01	SMM	24994
V-ICP-D	200.7/6010B	Vanadium, V, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
ZN-ICP-D	200.7/6010B	Zinc, Zn, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
AL-ICP-D	200.7/6010B	Aluminum, Al, Dissolved	ND (500)	UG/L	3/13/01	BLD	24969
P	SM4500-P-E2	Phosphorus, P	0.12 (0.02)	MG/L	3/13/01	JA/BS	24958

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

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ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I2565
Trace Analysis
6701 Aberdeen Suite 9
Lubbock, TX 79424-

Report Date: *20-Mar-01*

Phone: (806) 794-1296 **Ext:**
FAX: (806) 794-1298

Attn: Nell Green

Our Lab #: MAR01-05431 **Your Sample ID:** 164016 HMW-37
Date Logged-In: 3/12/01 **Sample Source:** NPDES/WWTP's
Matrix: WasteWater **Client Project #:** **PO#:** Proj. 700A21
Project #: 700A21 **Date Submitted to Lab:** 3/9/2001

- COLLECTION INFORMATION -

Date/Time/By: 1/30/01

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
AL-ICP	200.7/6010B	Aluminum, Al	1000 (500)	UG/L	3/13/01	BLD	24969
AS-MS	200.8/6020	Arsenic, As	14 (3.0)	UG/L	3/13/01	KRG	24971
BA-ICP	200.7/6010B	Barium, Ba	ND (50)	UG/L	3/13/01	BLD	24969
BE-MS	200.8/6020	Beryllium, Be	ND (1.0)	UG/L	3/13/01	KRG	24971
B-MS	200.8/6020	Boron, B	4900 (500)	UG/L	3/13/01	KRG	24971
CD-MS	200.8/6020	Cadmium, Cd	ND (5.0)	UG/L	3/13/01	KRG	24971
CA-ICP	200.7/6010B	Calcium, Ca	390 (0.5)	MG/L	3/13/01	BLD	24969
CR-ICP	200.7/6010B	Chromium, Cr	ND (100)	UG/L	3/13/01	BLD	24969
CO-ICP	200.7/6010B	Cobalt, Co	ND (50)	UG/L	3/13/01	BLD	24969
CU-ICP	200.7/6010B	Copper, Cu	490 (100)	UG/L	3/13/01	BLD	24969
FE-ICP	200.7/6010B	Iron, Fe	1500 (200)	UG/L	3/13/01	BLD	24969
PB-MS	200.8/6020	Lead, Pb	ND (10)	UG/L	3/12/01	RCM	24951
MG-ICP	200.7/6010B	Magnesium, Mg	400 (0.5)	MG/L	3/13/01	BLD	24969
MN-ICP	200.7/6010B	Manganese, Mn	66 (50)	UG/L	3/13/01	BLD	24969
MO-MS	200.8	Molybdenum, Mo	290 (30)	UG/L	3/13/01	KRG	24971
NI-ICP	200.7/6010B	Nickel, Ni	ND (100)	UG/L	3/13/01	BLD	24969
SE-GFAA	3113B/7740	Selenium, Se	ND (30)	UG/L	3/13/01	ROH	24956
SI-MS	200.8	Silicon, Si	20.3 (0.10)	MG/L	3/13/01	KRG	24971
AG-ICP	200.7/6010B	Silver, Ag	ND (50)	UG/L	3/13/01	BLD	24969
SR-MS	200.8/6020	Strontium, Sr	8400 (25)	UG/L	3/13/01	KRG	24971
V-ICP	200.7/6010B	Vanadium, V	ND (100)	UG/L	3/13/01	BLD	24969
ZN-ICP	200.7/6010B	Zinc, Zn	480 (50)	UG/L	3/13/01	BLD	24969

CERTIFICATIONS: NCDWQ263,NCDEH39700,AZ0071,OH4053,NY11071,A2LA102325

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Lab Number MAR01-05431 -Continued from Previous Page

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
SN-GFAA	3113B/7871	Tin, Sn	ND (500)	UG/L	3/14/01	SMM	24994
AS-MS-D	200.8/6020	Arsenic, As, Dissolved	11 (3.0)	UG/L	3/13/01	KRG	24971
BA-ICP-D	200.7/6010B	Barium, Ba, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
BE-MS-D	200.8/6020	Beryllium, Be, Dissolved	ND (1.0)	UG/L	3/13/01	KRG	24971
B-MS-D	200.8/6020	Boron, B, Dissolved	5200 (500)	UG/L	3/13/01	KRG	24971
CD-MS-D	200.8/6020	Cadmium, Cd, Dissolved	ND (5.0)	UG/L	3/13/01	KRG	24971
CA-ICP-D	200.7/6010B	Calcium, Ca, Dissolved	510 (0.5)	MG/L	3/13/01	BLD	24969
CR-ICP-D	200.7/6010B	Chromium, Cr, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
CO-ICP-D	200.7/6010B	Cobalt, Co, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
CU-ICP-D	200.7/6010B	Copper, Cu, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
FE-ICP-D	200.7/6010B	Iron, Fe, Dissolved	ND (200)	UG/L	3/13/01	BLD	24969
PB-MS-D	200.8/6020	Lead, Pb, Dissolved	ND (10)	UG/L	3/12/01	RCM	24951
LI-MS-D	6020	Lithium, Li, Dissolved	290 (100)	UG/L	3/13/01	KRG	24971
MG-ICP-D	200.7/6010B	Magnesium, Mg, Dissolved	530 (0.5)	MG/L	3/13/01	BLD	24969
MN-ICP-D	200.7/6010B	Manganese, Mn, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
MO-MS-D	200.8	Molybdenum, Mo, Dissolved	280 (30)	UG/L	3/13/01	KRG	24971
NI-ICP-D	200.7/6010B	Nickel, Ni, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
SE-GFAA-D	3113B/7740	Selenium, Se, Dissolved	ND (30)	UG/L	3/13/01	ROH	24956
SI-MS-D	200.8/6020	Silicon, Si, Dissolved	14.8 (0.2)	MG/L	3/13/01	KRG	24971
AG-ICP-D	200.7/6010B	Silver, Ag, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
SR-MS-D	6020	Strontium, Sr, Dissolved	8500 (10)	UG/L	3/13/01	KRG	24971
SN-GFAA-D	3113B/7871	Tin, Sn, Dissolved	ND (500)	UG/L	3/14/01	SMM	24994
V-ICP-D	200.7/6010B	Vanadium, V, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
ZN-ICP-D	200.7/6010B	Zinc, Zn, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
AL-ICP-D	200.7/6010B	Aluminum, Al, Dissolved	ND (500)	UG/L	3/13/01	BLD	24969
P	SM4500-P-E2	Phosphorus, P	0.08 (0.02)	MG/L	3/13/01	JA/BS	24958

Note: The result for the Selenium analytical bench spike was biased low and thus the sample result should be qualified due to a matrix effect. The analytical run was not rejected since the method quality control checks were within limits.

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

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Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I2565
Trace Analysis
6701 Aberdeen Suite 9
Lubbock, TX 79424-

Report Date: *20-Mar-01*

Phone: (806) 794-1296 **Ext:**
FAX: (806) 794-1298

Attn: Nell Green

Our Lab #: MAR01-05432 **Your Sample ID:** 164115 HMW-39
Date Logged-In: 3/12/01 **Sample Source:** NPDES/WWTP's
Matrix: WasteWater **Client Project #:** **PO#:** Proj. 700A21
Project #: 700A21 **Date Submitted to Lab:** 3/9/2001

- COLLECTION INFORMATION -

Date/Time/By: 1/31/01

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
AL-ICP	200.7/6010B	Aluminum, Al	ND (500)	UG/L	3/13/01	BLD	24969
AS-MS	200.8/6020	Arsenic, As	36 (3.0)	UG/L	3/13/01	KRG	24971
BA-ICP	200.7/6010B	Barium, Ba	ND (50)	UG/L	3/13/01	BLD	24969
BE-MS	200.8/6020	Beryllium, Be	ND (1.0)	UG/L	3/13/01	KRG	24971
B-MS	200.8/6020	Boron, B	5400 (500)	UG/L	3/13/01	KRG	24971
CD-MS	200.8/6020	Cadmium, Cd	ND (5.0)	UG/L	3/13/01	KRG	24971
CA-ICP	200.7/6010B	Calcium, Ca	390 (0.5)	MG/L	3/13/01	BLD	24969
CR-ICP	200.7/6010B	Chromium, Cr	390 (100)	UG/L	3/13/01	BLD	24969
CO-ICP	200.7/6010B	Cobalt, Co	ND (50)	UG/L	3/13/01	BLD	24969
CU-ICP	200.7/6010B	Copper, Cu	140 (100)	UG/L	3/13/01	BLD	24969
FE-ICP	200.7/6010B	Iron, Fe	260 (200)	UG/L	3/13/01	BLD	24969
PB-MS	200.8/6020	Lead, Pb	ND (10)	UG/L	3/12/01	RCM	24951
MG-ICP	200.7/6010B	Magnesium, Mg	980 (0.5)	MG/L	3/13/01	BLD	24969
MN-ICP	200.7/6010B	Manganese, Mn	62 (50)	UG/L	3/13/01	BLD	24969
MO-MS	200.8	Molybdenum, Mo	1200 (30)	UG/L	3/13/01	KRG	24971
NI-ICP	200.7/6010B	Nickel, Ni	ND (100)	UG/L	3/13/01	BLD	24969
SE-GFAA	3113B/7740	Selenium, Se	120 (60)	UG/L	3/13/01	ROH	24956
SI-MS	200.8	Silicon, Si	21.3 (0.10)	MG/L	3/13/01	KRG	24971
AG-ICP	200.7/6010B	Silver, Ag	ND (50)	UG/L	3/13/01	BLD	24969
SR-MS	200.8/6020	Strontium, Sr	9300 (25)	UG/L	3/13/01	KRG	24971
V-ICP	200.7/6010B	Vanadium, V	ND (100)	UG/L	3/13/01	BLD	24969
ZN-ICP	200.7/6010B	Zinc, Zn	180 (50)	UG/L	3/13/01	BLD	24969

CERTIFICATIONS: NCDWQ263,NCDEH39700,AZ0071,OH4053,NY11071,A2LA102325

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Lab Number MAR01-05432 -Continued from Previous Page

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
SN-GFAA	3113B/7871	Tin, Sn	ND (500)	UG/L	3/14/01	SMM	24994
AS-MS-D	200.8/6020	Arsenic, As, Dissolved	31 (3.0)	UG/L	3/13/01	KRG	24971
BA-ICP-D	200.7/6010B	Barium, Ba, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
BE-MS-D	200.8/6020	Beryllium, Be, Dissolved	ND (1.0)	UG/L	3/13/01	KRG	24971
B-MS-D	200.8/6020	Boron, B, Dissolved	5400 (500)	UG/L	3/13/01	KRG	24971
CD-MS-D	200.8/6020	Cadmium, Cd, Dissolved	ND (5.0)	UG/L	3/13/01	KRG	24971
CA-ICP-D	200.7/6010B	Calcium, Ca, Dissolved	470 (0.5)	MG/L	3/13/01	BLD	24969
CR-ICP-D	200.7/6010B	Chromium, Cr, Dissolved	460 (100)	UG/L	3/13/01	BLD	24969
CO-ICP-D	200.7/6010B	Cobalt, Co, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
CU-ICP-D	200.7/6010B	Copper, Cu, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
FE-ICP-D	200.7/6010B	Iron, Fe, Dissolved	ND (200)	UG/L	3/13/01	BLD	24969
PB-MS-D	200.8/6020	Lead, Pb, Dissolved	ND (10)	UG/L	3/12/01	RCM	24951
LI-MS-D	6020	Lithium, Li, Dissolved	430 (100)	UG/L	3/13/01	KRG	24971
MG-ICP-D	200.7/6010B	Magnesium, Mg, Dissolved	1200 (0.5)	MG/L	3/13/01	BLD	24969
MN-ICP-D	200.7/6010B	Manganese, Mn, Dissolved	59 (50)	UG/L	3/13/01	BLD	24969
MO-MS-D	200.8	Molybdenum, Mo, Dissolved	1200 (30)	UG/L	3/13/01	KRG	24971
NI-ICP-D	200.7/6010B	Nickel, Ni, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
SE-GFAA-D	3113B/7740	Selenium, Se, Dissolved	120 (60)	UG/L	3/13/01	ROH	24956
SI-MS-D	200.8/6020	Silicon, Si, Dissolved	20.8 (0.2)	MG/L	3/13/01	KRG	24971
AG-ICP-D	200.7/6010B	Silver, Ag, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
SR-MS-D	6020	Strontium, Sr, Dissolved	9600 (10)	UG/L	3/13/01	KRG	24971
SN-GFAA-D	3113B/7871	Tin, Sn, Dissolved	ND (500)	UG/L	3/14/01	SMM	24994
V-ICP-D	200.7/6010B	Vanadium, V, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
ZN-ICP-D	200.7/6010B	Zinc, Zn, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
AL-ICP-D	200.7/6010B	Aluminum, Al, Dissolved	ND (500)	UG/L	3/13/01	BLD	24969
P	SM4500-P-E2	Phosphorus, P	0.06 (0.02)	MG/L	3/13/01	JA/BS	24958

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

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ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I2565
Trace Analysis
6701 Aberdeen Suite 9
Lubbock, TX 79424-

Report Date: *20-Mar-01*

Phone: (806) 794-1296 **Ext:**
FAX: (806) 794-1298

Attn: Nell Green

Our Lab #: MAR01-05433 **Your Sample ID:** 164117 HMW-36

Date Logged-In: 3/12/01 **Sample Source:** NPDES/WWTP's

Matrix: WasteWater **Client Project #:** **PO#:** Proj. 700A21

Project #: 700A21 **Date Submitted to Lab:** 3/9/2001

- COLLECTION INFORMATION -

Date/Time/By: 1/31/01

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
AL-ICP	200.7/6010B	Aluminum, Al	ND (500)	UG/L	3/13/01	BLD	24969
AS-MS	200.8/6020	Arsenic, As	12 (3.0)	UG/L	3/13/01	KRG	24971
BA-ICP	200.7/6010B	Barium, Ba	ND (50)	UG/L	3/13/01	BLD	24969
BE-MS	200.8/6020	Beryllium, Be	ND (1.0)	UG/L	3/13/01	KRG	24971
B-MS	200.8/6020	Boron, B	9500 (500)	UG/L	3/13/01	KRG	24971
CD-MS	200.8/6020	Cadmium, Cd	ND (5.0)	UG/L	3/13/01	KRG	24971
CA-ICP	200.7/6010B	Calcium, Ca	460 (0.5)	MG/L	3/13/01	BLD	24969
CR-ICP	200.7/6010B	Chromium, Cr	ND (100)	UG/L	3/13/01	BLD	24969
CO-ICP	200.7/6010B	Cobalt, Co	ND (50)	UG/L	3/13/01	BLD	24969
CU-ICP	200.7/6010B	Copper, Cu	ND (100)	UG/L	3/13/01	BLD	24969
FE-ICP	200.7/6010B	Iron, Fe	350 (200)	UG/L	3/13/01	BLD	24969
PB-MS	200.8/6020	Lead, Pb	ND (10)	UG/L	3/12/01	RCM	24951
MG-ICP	200.7/6010B	Magnesium, Mg	580 (0.5)	MG/L	3/13/01	BLD	24969
MN-ICP	200.7/6010B	Manganese, Mn	415 (50)	UG/L	3/13/01	BLD	24969
MO-MS	200.8	Molybdenum, Mo	250 (30)	UG/L	3/13/01	KRG	24971
NI-ICP	200.7/6010B	Nickel, Ni	ND (100)	UG/L	3/13/01	BLD	24969
SE-GFAA	3113B/7740	Selenium, Se	ND (30)	UG/L	3/13/01	ROH	24956
SI-MS	200.8	Silicon, Si	14.8 (0.10)	MG/L	3/13/01	KRG	24971
AG-ICP	200.7/6010B	Silver, Ag	ND (50)	UG/L	3/13/01	BLD	24969
SR-MS	200.8/6020	Strontium, Sr	10000 (25)	UG/L	3/13/01	KRG	24971
V-ICP	200.7/6010B	Vanadium, V	ND (100)	UG/L	3/13/01	BLD	24969
ZN-ICP	200.7/6010B	Zinc, Zn	ND (50)	UG/L	3/13/01	BLD	24969

CERTIFICATIONS: NCDWQ263,NCDEH39700,AZ0071,OH4053,NY11071,A2LA102325

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Aqua Tech Environmental Laboratories, Inc.

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Lab Number MAR01-05433 -Continued from Previous Page

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
SN-GFAA	3113B/7871	Tin, Sn	ND (500)	UG/L	3/14/01	SMM	24994
AS-MS-D	200.8/6020	Arsenic, As, Dissolved	9.4 (3.0)	UG/L	3/13/01	KRG	24971
BA-ICP-D	200.7/6010B	Barium, Ba, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
BE-MS-D	200.8/6020	Beryllium, Be, Dissolved	ND (1.0)	UG/L	3/13/01	KRG	24971
B-MS-D	200.8/6020	Boron, B, Dissolved	9800 (500)	UG/L	3/13/01	KRG	24971
CD-MS-D	200.8/6020	Cadmium, Cd, Dissolved	ND (5.0)	UG/L	3/13/01	KRG	24971
CA-ICP-D	200.7/6010B	Calcium, Ca, Dissolved	520 (0.5)	MG/L	3/13/01	BLD	24969
CR-ICP-D	200.7/6010B	Chromium, Cr, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
CO-ICP-D	200.7/6010B	Cobalt, Co, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
CU-ICP-D	200.7/6010B	Copper, Cu, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
FE-ICP-D	200.7/6010B	Iron, Fe, Dissolved	ND (200)	UG/L	3/13/01	BLD	24969
PB-MS-D	200.8/6020	Lead, Pb, Dissolved	ND (10)	UG/L	3/12/01	RCM	24951
LI-MS-D	6020	Lithium, Li, Dissolved	500 (100)	UG/L	3/13/01	KRG	24971
MG-ICP-D	200.7/6010B	Magnesium, Mg, Dissolved	690 (0.5)	MG/L	3/13/01	BLD	24969
MN-ICP-D	200.7/6010B	Manganese, Mn, Dissolved	420 (50)	UG/L	3/13/01	BLD	24969
MO-MS-D	200.8	Molybdenum, Mo, Dissolved	280 (30)	UG/L	3/13/01	KRG	24971
NI-ICP-D	200.7/6010B	Nickel, Ni, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
SE-GFAA-D	3113B/7740	Selenium, Se, Dissolved	ND (30)	UG/L	3/12/01	ROH	24950
SI-MS-D	200.8/6020	Silicon, Si, Dissolved	14.5 (0.2)	MG/L	3/13/01	KRG	24971
AG-ICP-D	200.7/6010B	Silver, Ag, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
SR-MS-D	6020	Strontium, Sr, Dissolved	11000 (10)	UG/L	3/13/01	KRG	24971
SN-GFAA-D	3113B/7871	Tin, Sn, Dissolved	ND (500)	UG/L	3/14/01	SMM	24994
V-ICP-D	200.7/6010B	Vanadium, V, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
ZN-ICP-D	200.7/6010B	Zinc, Zn, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
AL-ICP-D	200.7/6010B	Aluminum, Al, Dissolved	ND (500)	UG/L	3/13/01	BLD	24969
P	SM4500-P-E2	Phosphorus, P	0.08 (0.02)	MG/L	3/13/01	JA/BS	24958

Note: The result for the Selenium analytical bench spike was biased low and thus the sample result should be qualified due to a matrix effect. The analytical run was not rejected since the method quality control checks were within limits.

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

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ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I2565
Trace Analysis
6701 Aberdeen Suite 9
Lubbock, TX 79424-

Report Date: *20-Mar-01*

Phone: (806) 794-1296 **Ext:**
FAX: (806) 794-1298

Attn: Nell Green

Our Lab #: MAR01-05434 **Your Sample ID:** 164119 HMW-39-QC
Date Logged-In: 3/12/01 **Sample Source:** NPDES/WWTP's
Matrix: WasteWater **Client Project #:** **PO#:** Proj. 700A21
Project #: 700A21 **Date Submitted to Lab:** 3/9/2001

- COLLECTION INFORMATION -

Date/Time/By: 1/31/01

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
AL-ICP	200.7/6010B	Aluminum, Al	ND (500)	UG/L	3/13/01	BLD	24969
AS-MS	200.8/6020	Arsenic, As	34 (3.0)	UG/L	3/13/01	KRG	24971
BA-ICP	200.7/6010B	Barium, Ba	ND (50)	UG/L	3/13/01	BLD	24969
BE-MS	200.8/6020	Beryllium, Be	ND (1.0)	UG/L	3/13/01	KRG	24971
B-MS	200.8/6020	Boron, B	5500 (500)	UG/L	3/13/01	KRG	24971
CD-MS	200.8/6020	Cadmium, Cd	ND (5.0)	UG/L	3/13/01	KRG	24971
CA-ICP	200.7/6010B	Calcium, Ca	400 (0.5)	MG/L	3/13/01	BLD	24969
CR-ICP	200.7/6010B	Chromium, Cr	380 (100)	UG/L	3/13/01	BLD	24969
CO-ICP	200.7/6010B	Cobalt, Co	ND (50)	UG/L	3/13/01	BLD	24969
CU-ICP	200.7/6010B	Copper, Cu	ND (100)	UG/L	3/13/01	BLD	24969
FE-ICP	200.7/6010B	Iron, Fe	ND (200)	UG/L	3/13/01	BLD	24969
PB-MS	200.8/6020	Lead, Pb	ND (10)	UG/L	3/12/01	RCM	24951
MG-ICP	200.7/6010B	Magnesium, Mg	1000 (0.5)	MG/L	3/13/01	BLD	24969
MN-ICP	200.7/6010B	Manganese, Mn	64 (50)	UG/L	3/13/01	BLD	24969
MO-MS	200.8	Molybdenum, Mo	1200 (30)	UG/L	3/13/01	KRG	24971
NI-ICP	200.7/6010B	Nickel, Ni	ND (100)	UG/L	3/13/01	BLD	24969
SE-GFAA	3113B/7740	Selenium, Se	130 (60)	UG/L	3/13/01	ROH	24956
SI-MS	200.8	Silicon, Si	21.5 (0.10)	MG/L	3/13/01	KRG	24971
AG-ICP	200.7/6010B	Silver, Ag	ND (50)	UG/L	3/13/01	BLD	24969
SR-MS	200.8/6020	Strontium, Sr	9700 (25)	UG/L	3/13/01	KRG	24971
V-ICP	200.7/6010B	Vanadium, V	ND (100)	UG/L	3/13/01	BLD	24969
ZN-ICP	200.7/6010B	Zinc, Zn	ND (50)	UG/L	3/13/01	BLD	24969

CERTIFICATIONS: NCDWQ263,NCDEH39700,AZ0071,OH4053,NY11071,A2LA102325

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Lab Number MAR01-05434 -Continued from Previous Page

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
SN-GFAA	3113B/7871	Tin, Sn	ND (500)	UG/L	3/14/01	SMM	24994
AS-MS-D	200.8/6020	Arsenic, As, Dissolved	31 (3.0)	UG/L	3/13/01	KRG	24971
BA-ICP-D	200.7/6010B	Barium, Ba, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
BE-MS-D	200.8/6020	Beryllium, Be, Dissolved	ND (1.0)	UG/L	3/13/01	KRG	24971
B-MS-D	200.8/6020	Boron, B, Dissolved	5100 (500)	UG/L	3/13/01	KRG	24971
CD-MS-D	200.8/6020	Cadmium, Cd, Dissolved	ND (5.0)	UG/L	3/13/01	KRG	24971
CA-ICP-D	200.7/6010B	Calcium, Ca, Dissolved	470 (0.5)	MG/L	3/13/01	BLD	24969
CR-ICP-D	200.7/6010B	Chromium, Cr, Dissolved	430 (100)	UG/L	3/13/01	BLD	24969
CO-ICP-D	200.7/6010B	Cobalt, Co, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
CU-ICP-D	200.7/6010B	Copper, Cu, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
FE-ICP-D	200.7/6010B	Iron, Fe, Dissolved	ND (200)	UG/L	3/13/01	BLD	24969
PB-MS-D	200.8/6020	Lead, Pb, Dissolved	ND (10)	UG/L	3/12/01	RCM	24951
LI-MS-D	6020	Lithium, Li, Dissolved	410 (100)	UG/L	3/13/01	KRG	24971
MG-ICP-D	200.7/6010B	Magnesium, Mg, Dissolved	1200 (0.5)	MG/L	3/13/01	BLD	24969
MN-ICP-D	200.7/6010B	Manganese, Mn, Dissolved	72 (50)	UG/L	3/13/01	BLD	24969
MO-MS-D	200.8	Molybdenum, Mo, Dissolved	1100 (30)	UG/L	3/13/01	KRG	24971
NI-ICP-D	200.7/6010B	Nickel, Ni, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
SE-GFAA-D	3113B/7740	Selenium, Se, Dissolved	140 (60)	UG/L	3/13/01	ROH	24956
SI-MS-D	200.8/6020	Silicon, Si, Dissolved	19.8 (0.2)	MG/L	3/13/01	KRG	24971
AG-ICP-D	200.7/6010B	Silver, Ag, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
SR-MS-D	6020	Strontium, Sr, Dissolved	9100 (10)	UG/L	3/13/01	KRG	24971
SN-GFAA-D	3113B/7871	Tin, Sn, Dissolved	ND (500)	UG/L	3/14/01	SMM	24994
V-ICP-D	200.7/6010B	Vanadium, V, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
ZN-ICP-D	200.7/6010B	Zinc, Zn, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
AL-ICP-D	200.7/6010B	Aluminum, Al, Dissolved	ND (500)	UG/L	3/13/01	BLD	24969
P	SM4500-P-E2	Phosphorus, P	0.17 (0.02)	MG/L	3/13/01	JA/BS	24958

End of Report

Report Approved By: Deborah K. Johnson

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ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I2565
Trace Analysis
6701 Aberdeen Suite 9
Lubbock, TX 79424-

Report Date: *20-Mar-01*

Phone: (806) 794-1296 **Ext:**
FAX: (806) 794-1298

Attn: Nell Green

Our Lab #: MAR01-05435 **Your Sample ID:** 164121 HMW-40
Date Logged-In: 3/12/01 **Sample Source:** NPDES/WWTP's
Matrix: WasteWater **Client Project #:** **PO#:** Proj. 700A21
Project #: 700A21 **Date Submitted to Lab:** 3/9/2001

- COLLECTION INFORMATION -

Date/Time/By: 1/31/01

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
AL-ICP	200.7/6010B	Aluminum, Al	ND (500)	UG/L	3/13/01	BLD	24969
AS-MS	200.8/6020	Arsenic, As	45 (3.0)	UG/L	3/13/01	KRG	24971
BA-ICP	200.7/6010B	Barium, Ba	ND (50)	UG/L	3/13/01	BLD	24969
BE-MS	200.8/6020	Beryllium, Be	ND (1.0)	UG/L	3/13/01	KRG	24971
B-MS	200.8/6020	Boron, B	6000 (500)	UG/L	3/13/01	KRG	24971
CD-MS	200.8/6020	Cadmium, Cd	ND (5.0)	UG/L	3/13/01	KRG	24971
CA-ICP	200.7/6010B	Calcium, Ca	470 (0.5)	MG/L	3/13/01	BLD	24969
CR-ICP	200.7/6010B	Chromium, Cr	ND (100)	UG/L	3/13/01	BLD	24969
CO-ICP	200.7/6010B	Cobalt, Co	ND (50)	UG/L	3/13/01	BLD	24969
CU-ICP	200.7/6010B	Copper, Cu	ND (100)	UG/L	3/13/01	BLD	24969
FE-ICP	200.7/6010B	Iron, Fe	420 (200)	UG/L	3/13/01	BLD	24969
PB-MS	200.8/6020	Lead, Pb	ND (10)	UG/L	3/12/01	RCM	24951
MG-ICP	200.7/6010B	Magnesium, Mg	1900 (0.5)	MG/L	3/13/01	BLD	24969
MN-ICP	200.7/6010B	Manganese, Mn	98 (50)	UG/L	3/13/01	BLD	24969
MO-MS	200.8	Molybdenum, Mo	2000 (30)	UG/L	3/13/01	KRG	24971
NI-ICP	200.7/6010B	Nickel, Ni	ND (100)	UG/L	3/13/01	BLD	24969
SE-GFAA	3113B/7740	Selenium, Se	330 (120)	UG/L	3/13/01	ROH	24956
SI-MS	200.8	Silicon, Si	11.8 (0.10)	MG/L	3/13/01	KRG	24971
AG-ICP	200.7/6010B	Silver, Ag	ND (50)	UG/L	3/13/01	BLD	24969
SR-MS	200.8/6020	Strontium, Sr	12000 (25)	UG/L	3/13/01	KRG	24971
V-ICP	200.7/6010B	Vanadium, V	ND (100)	UG/L	3/13/01	BLD	24969
ZN-ICP	200.7/6010B	Zinc, Zn	ND (50)	UG/L	3/13/01	BLD	24969

CERTIFICATIONS: NCDWQ263,NCDEH39700,AZ0071,OH4053,NY11071,A2LA102325

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Lab Number MAR01-05435 -Continued from Previous Page

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
SN-GFAA	3113B/7871	Tin, Sn	ND (500)	UG/L	3/14/01	SMM	24994
AS-MS-D	200.8/6020	Arsenic, As, Dissolved	46 (3.0)	UG/L	3/13/01	KRG	24971
BA-ICP-D	200.7/6010B	Barium, Ba, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
BE-MS-D	200.8/6020	Beryllium, Be, Dissolved	ND (1.0)	UG/L	3/13/01	KRG	24971
B-MS-D	200.8/6020	Boron, B, Dissolved	6000 (500)	UG/L	3/13/01	KRG	24971
CD-MS-D	200.8/6020	Cadmium, Cd, Dissolved	ND (5.0)	UG/L	3/13/01	KRG	24971
CA-ICP-D	200.7/6010B	Calcium, Ca, Dissolved	530 (0.5)	MG/L	3/13/01	BLD	24969
CR-ICP-D	200.7/6010B	Chromium, Cr, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
CO-ICP-D	200.7/6010B	Cobalt, Co, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
CU-ICP-D	200.7/6010B	Copper, Cu, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
FE-ICP-D	200.7/6010B	Iron, Fe, Dissolved	ND (200)	UG/L	3/13/01	BLD	24969
PB-MS-D	200.8/6020	Lead, Pb, Dissolved	ND (10)	UG/L	3/12/01	RCM	24951
LI-MS-D	6020	Lithium, Li, Dissolved	690 (100)	UG/L	3/13/01	KRG	24971
MG-ICP-D	200.7/6010B	Magnesium, Mg, Dissolved	2300 (0.5)	MG/L	3/13/01	BLD	24969
MN-ICP-D	200.7/6010B	Manganese, Mn, Dissolved	80 (50)	UG/L	3/13/01	BLD	24969
MO-MS-D	200.8	Molybdenum, Mo, Dissolved	1900 (30)	UG/L	3/13/01	KRG	24971
NI-ICP-D	200.7/6010B	Nickel, Ni, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
SE-GFAA-D	3113B/7740	Selenium, Se, Dissolved	340 (120)	UG/L	3/13/01	ROH	24956
SI-MS-D	200.8/6020	Silicon, Si, Dissolved	8.3 (0.2)	MG/L	3/13/01	KRG	24971
AG-ICP-D	200.7/6010B	Silver, Ag, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
SR-MS-D	6020	Strontium, Sr, Dissolved	12000 (10)	UG/L	3/13/01	KRG	24971
SN-GFAA-D	3113B/7871	Tin, Sn, Dissolved	ND (500)	UG/L	3/14/01	SMM	24994
V-ICP-D	200.7/6010B	Vanadium, V, Dissolved	ND (150)	UG/L	3/13/01	BLD	24969
ZN-ICP-D	200.7/6010B	Zinc, Zn, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
AL-ICP-D	200.7/6010B	Aluminum, Al, Dissolved	ND (500)	UG/L	3/13/01	BLD	24969
P	SM4500-P-E2	Phosphorus, P	0.11 (0.02)	MG/L	3/13/01	JA/BS	24958

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

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ATEL

Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Client #: I2565 **Report Date:** *20-Mar-01*

Trace Analysis
6701 Aberdeen Suite 9
Lubbock, TX 79424-

Phone: (806) 794-1296 **Ext:**
FAX: (806) 794-1298

Attn: Nell Green

Our Lab #: MAR01-05436 **Your Sample ID:** 164123 HMW-4 1
Date Logged-In: 3/12/01 **Sample Source:** NPDES/WWTP's
Matrix: WasteWater **Client Project #:** **PO#:** Proj. 700A21
Project #: 700A21 **Date Submitted to Lab:** 3/9/2001

- COLLECTION INFORMATION -

Date/Time/By: 1/31/01

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
AL-ICP	200.7/6010B	Aluminum, Al	1000 (500)	UG/L	3/13/01	BLD	24969
AS-MS	200.8/6020	Arsenic, As	37 (3.0)	UG/L	3/13/01	KRG	24971
BA-ICP	200.7/6010B	Barium, Ba	ND (50)	UG/L	3/13/01	BLD	24969
BE-MS	200.8/6020	Beryllium, Be	ND (1.0)	UG/L	3/13/01	KRG	24971
B-MS	200.8/6020	Boron, B	2800 (500)	UG/L	3/13/01	KRG	24971
CD-MS	200.8/6020	Cadmium, Cd	ND (5.0)	UG/L	3/13/01	KRG	24971
CA-ICP	200.7/6010B	Calcium, Ca	510 (0.5)	MG/L	3/13/01	BLD	24969
CR-ICP	200.7/6010B	Chromium, Cr	2500 (100)	UG/L	3/13/01	BLD	24969
CO-ICP	200.7/6010B	Cobalt, Co	ND (50)	UG/L	3/13/01	BLD	24969
CU-ICP	200.7/6010B	Copper, Cu	ND (100)	UG/L	3/13/01	BLD	24969
FE-ICP	200.7/6010B	Iron, Fe	890 (200)	UG/L	3/13/01	BLD	24969
PB-MS	200.8/6020	Lead, Pb	ND (10)	UG/L	3/12/01	RCM	24951
MG-ICP	200.7/6010B	Magnesium, Mg	1300 (0.5)	MG/L	3/13/01	BLD	24969
MN-ICP	200.7/6010B	Manganese, Mn	87 (50)	UG/L	3/13/01	BLD	24969
MO-MS	200.8	Molybdenum, Mo	330 (30)	UG/L	3/13/01	KRG	24971
NI-ICP	200.7/6010B	Nickel, Ni	ND (100)	UG/L	3/13/01	BLD	24969
SE-GFAA	3113B/7740	Selenium, Se	230 (120)	UG/L	3/13/01	ROH	24956
SI-MS	200.8	Silicon, Si	24.7 (0.10)	MG/L	3/13/01	KRG	24971
AG-ICP	200.7/6010B	Silver, Ag	ND (50)	UG/L	3/13/01	BLD	24969
SR-MS	200.8/6020	Strontium, Sr	11000 (25)	UG/L	3/13/01	KRG	24971
V-ICP	200.7/6010B	Vanadium, V	ND (100)	UG/L	3/13/01	BLD	24969
ZN-ICP	200.7/6010B	Zinc, Zn	67 (50)	UG/L	3/13/01	BLD	24969

CERTIFICATIONS: NCDWQ263,NCDEH39700,AZ0071,OH4053,NY11071,A2LA102325

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Aqua Tech Environmental Laboratories, Inc.

- CERTIFICATE OF ANALYSIS -

Lab Number MAR01-05436 -Continued from Previous Page

Test Group	EPA Method	Test	Result	Units	Analysis Date	Analyst	WS#
SN-GFAA	3113B/7871	Tin, Sn	ND (500)	UG/L	3/14/01	SMM	24994
AS-MS-D	200.8/6020	Arsenic, As, Dissolved	37 (3.0)	UG/L	3/13/01	KRG	24971
BA-ICP-D	200.7/6010B	Barium, Ba, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
BE-MS-D	200.8/6020	Beryllium, Be, Dissolved	ND (1.0)	UG/L	3/13/01	KRG	24971
B-MS-D	200.8/6020	Boron, B, Dissolved	2900 (500)	UG/L	3/13/01	KRG	24971
CD-MS-D	200.8/6020	Cadmium, Cd, Dissolved	ND (5.0)	UG/L	3/13/01	KRG	24971
CA-ICP-D	200.7/6010B	Calcium, Ca, Dissolved	460 (0.5)	MG/L	3/13/01	BLD	24969
CR-ICP-D	200.7/6010B	Chromium, Cr, Dissolved	2400 (100)	UG/L	3/13/01	BLD	24969
CO-ICP-D	200.7/6010B	Cobalt, Co, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
CU-ICP-D	200.7/6010B	Copper, Cu, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
FE-ICP-D	200.7/6010B	Iron, Fe, Dissolved	ND (200)	UG/L	3/13/01	BLD	24969
PB-MS-D	200.8/6020	Lead, Pb, Dissolved	ND (10)	UG/L	3/12/01	RCM	24951
LI-MS-D	6020	Lithium, Li, Dissolved	550 (100)	UG/L	3/13/01	KRG	24971
MG-ICP-D	200.7/6010B	Magnesium, Mg, Dissolved	1200 (0.5)	MG/L	3/13/01	BLD	24969
MN-ICP-D	200.7/6010B	Manganese, Mn, Dissolved	72 (50)	UG/L	3/13/01	BLD	24969
MO-MS-D	200.8	Molybdenum, Mo, Dissolved	330 (30)	UG/L	3/13/01	KRG	24971
NI-ICP-D	200.7/6010B	Nickel, Ni, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
SE-GFAA-D	3113B/7740	Selenium, Se, Dissolved	240 (120)	UG/L	3/12/01	ROH	24950
SI-MS-D	200.8/6020	Silicon, Si, Dissolved	20.3 (0.2)	MG/L	3/13/01	KRG	24971
AG-ICP-D	200.7/6010B	Silver, Ag, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
SR-MS-D	6020	Strontium, Sr, Dissolved	12000 (10)	UG/L	3/13/01	KRG	24971
SN-GFAA-D	3113B/7871	Tin, Sn, Dissolved	ND (500)	UG/L	3/14/01	SMM	24994
V-ICP-D	200.7/6010B	Vanadium, V, Dissolved	ND (100)	UG/L	3/13/01	BLD	24969
ZN-ICP-D	200.7/6010B	Zinc, Zn, Dissolved	ND (50)	UG/L	3/13/01	BLD	24969
AL-ICP-D	200.7/6010B	Aluminum, Al, Dissolved	ND (500)	UG/L	3/13/01	BLD	24969
P	SM4500-P-E2	Phosphorus, P	0.10 (0.02)	MG/L	3/13/01	JA/BS	24958

End of Report

Report Approved By: Deborah K. Johnson

Deborah K. Johnson

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- QUALITY CONTROL REPORT -

Printed: 3/20/2001

WS#	Lab#	Test ID	QC Code	Result	Units	True Added	-- QC Calculations -- QC1	-- QC Calculations -- QC2	Lower Limit	Upper Limit
24958	ICV	P	C	.3002	MG/L	0.273	110 %R:		90	110
24971	LCS	AS	C	20.3717	UG/L	20	102 %R:		50	150
24971	LCS	B	C	104.284	UG/L	100	104 %R:		50	150
24971	LCS	BE	C	10.7924	UG/L	10	108 %R:		50	150
24971	LCS	CD	C	9.8688	UG/L	10	99 %R:		50	150
24971	LCS	LI	C	37.5978	UG/L	40	94 %R:		50	150
24971	LCS	MO	C	103.9668	UG/L	100	104 %R:		50	150
24971	LCS	SB	C	19.9123	UG/L	20	100 %R:		50	150
24971	LCS	SI	C	.1059	MG/L	0.1	106 %R:		50	150
24971	LCS	SR	C	107.2349	UG/L	100	107 %R:		50	150
24971	LCS	TL	C	9.6631	UG/L	10	97 %R:		50	150
24971	LCS	U	C	103.4032	UG/L	100	103 %R:		50	150
24958	LCSA	P	C	.2547	MG/L	0.25	102 %R:		80	120
24951	LCSA 3.1.3	BE	C	9.4711	UG/L	10	95 %R:		50	150
24971	LCSA 3.12.3	AS	C	21.9528	UG/L	20	110 %R:		50	150
24971	LCSA 3.12.3	B	C	106.8364	UG/L	100	107 %R:		50	150
24971	LCSA 3.12.3	BE	C	10.7712	UG/L	10	108 %R:		50	150
24971	LCSA 3.12.3	CD	C	10.308	UG/L	10	103 %R:		50	150
24971	LCSA 3.12.3	LI	C	508.7466	UG/L	500	102 %R:		50	150
24971	LCSA 3.12.3	MO	C	113.8052	UG/L	100	114 %R:		50	150
24951	LCSA 3.12.3	PB	C	10.7734	UG/L	10	108 %R:		50	150
24971	LCSA 3.12.3	SB	C	22.1321	UG/L	20	111 %R:		50	150
24956	LCSA 3.12.3	SE	C	22.15	UG/L	20	111 %R:		70	125
24971	LCSA 3.12.3	SI	C	6.1183	MG/L	5	122 %R:		50	150
24980	LCSA 3.12.3	SN	C	118.66	UG/L	100	119 %R:		80	120
24971	LCSA 3.12.3	SR	C	110.4333	UG/L	100	110 %R:		50	150
24951	LCSA 3.12.3	TL	C	10.1134	UG/L	10	101 %R:		50	150
24956	LCSA 3.13.1	SE	C	14.81	UG/L	20	74 %R:		70	125
24971	LCSA 3.5.3	AS	C	20.9118	UG/L	20	105 %R:		50	150
24971	LCSA 3.5.3	BE	C	10.5722	UG/L	10	106 %R:		50	150
24971	LCSA 3.5.3	CD	C	9.8186	UG/L	10	98 %R:		50	150
24971	LCSA 3.5.3	MO	C	106.5544	UG/L	100	107 %R:		50	150
24971	LCSA 3.5.3	SB	C	20.8714	UG/L	20	104 %R:		50	150
24971	LCSA 3.5.3	SI	C	5.5442	MG/L	5	111 %R:		50	150
24971	LCSA 3.5.3	SR	C	103.7934	UG/L	100	104 %R:		50	150
24971	LCSA 3.5.3	TL	C	9.0714	UG/L	10	91 %R:		50	150
24971	LCSA 3.5.3	U	C	100.999	UG/L	100	101 %R:		50	150

QC Code Legend

B	Blanks	K	Calibration Checks	S	Spikes
C	Control Samples	M	Matrix Spike Duplicates		
D	Duplicates	R	Surrogates		

- QUALITY CONTROL REPORT -

Printed: 3/20/2001

WS#	Lab#	Test ID	QC Code	Result	Units	True Added	-- QC Calculations -- QC1	-- QC Calculations -- QC2	Lower Limit	Upper Limit
24951	LCSA 3.8.3	AS	C	20.4864	UG/L	20	102 %R:		50	150
24951	LCSA 3.8.3	BE	C	10.0807	UG/L	10	101 %R:		50	150
24951	LCSA 3.8.3	CD	C	10.0619	UG/L	10	101 %R:		50	150
24951	LCSA 3.8.3	CR	C	107.4993	UG/L	100	107 %R:		50	150
24951	LCSA 3.8.3	NI	C	105.2385	UG/L	100	105 %R:		50	150
24951	LCSA 3.8.3	SB	C	20.3706	UG/L	20	102 %R:		50	150
24950	LCSA 3.8.3	SE	C	16.32	UG/L	20	82 %R:		70	125
24951	LCSA 3.8.3	TL	C	10.6826	UG/L	10	107 %R:		50	150
24969	LCSA3.12.2	BA	C	1.87867	MG/L	2	94 %R:		80	120
24969	LCSA3.12.2	CR	C	.93772	MG/L	1	94 %R:		80	120
24969	LCSA3.12.2	MN	C	.93606	MG/L	1	94 %R:		80	120
24969	LCSA3.12.2	NI	C	.94695	MG/L	1	95 %R:		80	120
24969	LCSA3.12.2	PB	C	1.09036	MG/L	1.1	99 %R:		80	120
24969	LCSA3.13.1	AG	C	.11705	MG/L	0.1	117 %R:		80	120
24969	LCSA3.13.1	AL	C	2.03795	MG/L	2	102 %R:		80	120
24969	LCSA3.13.1	BA	C	2.102	MG/L	2	105 %R:		80	120
24969	LCSA3.13.1	CA	C	2.4475	MG/L	2.5	98 %R:		80	120
24969	LCSA3.13.1	CO	C	1.03136	MG/L	1	103 %R:		80	120
24969	LCSA3.13.1	CR	C	1.01535	MG/L	1	102 %R:		80	120
24969	LCSA3.13.1	CU	C	1.0316	MG/L	1	103 %R:		80	120
24969	LCSA3.13.1	FE	C	2.06762	MG/L	2	103 %R:		80	120
24969	LCSA3.13.1	K	C	10.59996	MG/L	10	106 %R:		80	120
24969	LCSA3.13.1	MG	C	2.62135	MG/L	2.5	105 %R:		80	120
24969	LCSA3.13.1	MN	C	1.01641	MG/L	1	102 %R:		80	120
24969	LCSA3.13.1	NI	C	1.05232	MG/L	1	105 %R:		80	120
24969	LCSA3.13.1	V	C	2.03247	MG/L	2	102 %R:		80	120
24969	LCSA3.13.1	ZN	C	1.02543	MG/L	1	103 %R:		80	120
24969	LCSA3.9.2	CR	C	.89851	MG/L	1	90 %R:		80	120
24969	LCSA3.9.2	FE	C	1.82209	MG/L	2	91 %R:		80	120
24969	LCSA3.9.2	NI	C	.90997	MG/L	1	91 %R:		80	120
24969	LCSA3.9.2	PB	C	1.08026	MG/L	1.1	98 %R:		80	120
24969	LCSA3.9.2	ZN	C	.87813	MG/L	1	88 %R:		80	120
24969	LCSA3.9.2 RP	CR	C	.92151	MG/L	1	92 %R:		80	120
24969	LCSA3.9.2 RP	FE	C	1.89315	MG/L	2	95 %R:		80	120
24969	LCSA3.9.2 RP	NI	C	.9321	MG/L	1	93 %R:		80	120
24969	LCSA3.9.2 RP	PB	C	1.09175	MG/L	1.1	99 %R:		80	120
24969	LCSA3.9.2 RP	ZN	C	.90047	MG/L	1	90 %R:		80	120

QC Code Legend

B	Blanks	K	Calibration Checks	S	Spikes
C	Control Samples	M	Matrix Spike Duplicates		
D	Duplicates	R	Surrogates		

- QUALITY CONTROL REPORT -

Printed: 3/20/2001

WS#	Lab#	Test ID	QC Code	Result	Units	True Added	-- QC Calculations -- QC1			-- QC Calculations -- QC2	Lower Limit	Upper Limit
24956	LCSAL 3.12.2	SE	C	.1961	MG/L	0.2	98	%R:			80	120
24956	LCSAL 3.9.2	SE	C	.1856	MG/L	0.2	93	%R:			80	120
24956	LCSS 3.9 4B	SE	C	76.6367713	MG/KG	86.4	89	%R:			70	125
24969	LCSS3.9.4A	AG	C	27.6653992	MG/KG	33.7	82	%R:			70	120
24969	LCSS3.9.4A	CD	C	108.950570	MG/KG	123	89	%R:			70	120
24969	LCSS3.9.4A	CR	C	141.524714	MG/KG	195.7	72	%R:			70	120
24969	LCSS3.9.4A	PB	C	113.836501	MG/KG	131	87	%R:			70	120
24969	LFB	AL	C	9.58331	MG/L	10	96	%R:			80	120
24951	LFB	AS	C	21.2511	UG/L	20	106	%R:			50	150
24969	LFB	BA	C	9.39854	MG/L	10	94	%R:			80	120
24951	LFB	BE	C	10.3295	UG/L	10	103	%R:			50	150
24969	LFB	CA	C	23.83985	MG/L	25	95	%R:			80	120
24969	LFB	CD	C	1.28595	MG/L	1.25	103	%R:			80	120
24951	LFB	CD	C	10.3713	UG/L	10	104	%R:			50	150
24969	LFB	CO	C	2.38056	MG/L	2.5	95	%R:			80	120
24969	LFB	CR	C	.95164	MG/L	1	95	%R:			80	120
24951	LFB	CR	C	103.6132	UG/L	100	104	%R:			50	150
24969	LFB	CU	C	1.18093	MG/L	1.25	94	%R:			80	120
24969	LFB	FE	C	4.70924	MG/L	5	94	%R:			80	120
24969	LFB	K	C	24.54562	MG/L	25	98	%R:			80	120
24969	LFB	MG	C	24.42208	MG/L	25	98	%R:			80	120
24969	LFB	MN	C	2.37558	MG/L	2.5	95	%R:			80	120
24969	LFB	NA	C	23.97567	MG/L	25	96	%R:			80	120
24951	LFB	NI	C	103.0107	UG/L	100	103	%R:			50	150
24969	LFB	NI	C	2.39293	MG/L	2.5	96	%R:			80	120
24951	LFB	PB	C	10.3546	UG/L	10	104	%R:			50	150
24969	LFB	PB	C	2.45803	MG/L	2.5	98	%R:			80	120
24951	LFB	SB	C	21.8075	UG/L	20	109	%R:			50	150
24950	LFB	SE	C	23.28	UG/L	24	97	%R:			70	125
24956	LFB	SE	C	25.87	UG/L	24	108	%R:			70	125
24951	LFB	TL	C	10.3768	UG/L	10	104	%R:			50	150
24969	LFB	V	C	2.35459	MG/L	2.5	94	%R:			80	120
24969	LFB	ZN	C	2.50351	MG/L	2.5	100	%R:			80	120
24951	MAR01-04500D	BE	D	93.4682	UG/L		4	%D				20
24958	MAR01-04891D	P	D	.6392	MG/L		4	%D				20
24958	MAR01-04891S	P	S	1.249	MG/L	0.5	127	%R:	*		75	125
24958	MAR01-05021D	P	D	.0586	MG/L		6	%D		(<5 x MDL)		20

QC Code Legend

B	Blanks	K	Calibration Checks	S	Spikes
C	Control Samples	M	Matrix Spike Duplicates		
D	Duplicates	R	Surrogates		

- QUALITY CONTROL REPORT -

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WS#	Lab#	Test ID	QC Code	Result	Units	True Added	-- QC Calculations -- QC1				-- QC Calculations -- QC2	Lower Limit	Upper Limit
24958	MAR01-05021S	P	S	.5712	MG/L	0.5	103	%R:				75	125
24951	MAR01-05083M	AS	M	21.546	UG/L	20	109	%R:			3 %RPD	75	125
24951	MAR01-05083M	BE	M	10.4112	UG/L	10	104	%R:			2 %RPD	75	125
24951	MAR01-05083M	CD	M	9.9694	UG/L	10	100	%R:			2 %RPD	75	125
24951	MAR01-05083M	CR	M	106.2067	UG/L	100	103	%R:			4 %RPD	75	125
24951	MAR01-05083M	NI	M	106.1865	UG/L	100	103	%R:			3 %RPD	75	125
24951	MAR01-05083M	SB	M	21.3991	UG/L	20	105	%R:			2 %RPD	75	125
24950	MAR01-05083M	SE	M	13.47	UG/L	20	64	%R:	*		8 %RPD	80	120
24951	MAR01-05083M	TL	M	10.319	UG/L	10	103	%R:			3 %RPD	75	125
24951	MAR01-05083S	AS	S	22.1393	UG/L	20	111	%R:				75	125
24951	MAR01-05083S	BE	S	10.1558	UG/L	10	102	%R:				75	125
24951	MAR01-05083S	CD	S	10.204	UG/L	10	103	%R:				75	125
24951	MAR01-05083S	CR	S	110.2488	UG/L	100	108	%R:				75	125
24951	MAR01-05083S	NI	S	109.2166	UG/L	100	106	%R:				75	125
24951	MAR01-05083S	SB	S	21.9126	UG/L	20	107	%R:				75	125
24950	MAR01-05083S	SE	S	14.61	UG/L	20	69	%R:	*			80	120
24951	MAR01-05083S	TL	S	10.5849	UG/L	10	105	%R:				75	125
24951	MAR01-05084D	AS	D	.8963	UG/L		1	%D		(<5 x MDL)			20
24951	MAR01-05084D	BE	D	.032	UG/L		84	%D	*	(<5 x MDL)			20
24951	MAR01-05084D	CD	D	-.0688	UG/L		5	%D		(<5 x MDL)			20
24951	MAR01-05084D	CR	D	2.8737	UG/L		25	%D	*	(<5 x MDL)			20
24951	MAR01-05084D	NI	D	7.9429	UG/L		8	%D		(<5 x MDL)			20
24951	MAR01-05084D	SB	D	.0883	UG/L		56	%D	*	(<5 x MDL)			20
24950	MAR01-05084D	SE	D	.48	UG/L		74	%D	*	(<5 x MDL)			20
24951	MAR01-05084D	TL	D	.1093	UG/L		21	%D	*	(<5 x MDL)			20
24956	MAR01-05174D	SE	D	0	MG/L		0	%D		(<5 x MDL)			20
24969	MAR01-05177D	CU	D	0	UG/L		0	%D		(<5 x MDL)			20
24956	MAR01-05180S	SE	S	.945	MG/L	1	95	%R:				50	150
24969	MAR01-05186S	CU	S	1152.81	UG/L	1250	92	%R:				75	125
24969	MAR01-05186S	ZN	S	2366.43	UG/L	2500	94	%R:				75	125
24956	MAR01-05192S	SE	S	1.0085	MG/L	0.96	105	%R:				75	125
24969	MAR01-05193D	AG	D	.013728720	MG/KG		173	%D	*	(<5 x MDL)			20
24969	MAR01-05193D	CR	D	3.58923668	MG/KG		11	%D		(<5 x MDL)			20
24969	MAR01-05193D	PB	D	1.48160351	MG/KG		40	%D	*	(<5 x MDL)			20
24956	MAR01-05193D	SE	D	0	MG/KG		0	%D		(<5 x MDL)			20
24969	MAR01-05207D	PB	D	27.8504273	MG/KG		9	%D					20
24969	MAR01-05214M	PB	M	158.606255	MG/KG	120	85	%R:			10 %RPD	75	125

QC Code Legend

B	Blanks	K	Calibration Checks	S	Spikes
C	Control Samples	M	Matrix Spike Duplicates		
D	Duplicates	R	Surrogates		

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24969	MAR01-05214S	PB	S	142.911532	MG/KG	118	73	%R:	*		75	125
24971	MAR01-05253D	AS	D	.6658	UG/L		110	%D	*	(<5 x MDL)		20
24969	MAR01-05253D	BA	D	55.99	UG/L		1	%D				20
24971	MAR01-05253D	BE	D	0	UG/L		0	%D		(<5 x MDL)		20
24971	MAR01-05253D	CD	D	0	UG/L		110	%D	*	(<5 x MDL)		20
24969	MAR01-05253D	CR	D	4.16	UG/L		61	%D	*	(<5 x MDL)		20
24969	MAR01-05253D	MN	D	22.39	UG/L		54	%D	*	(<5 x MDL)		20
24969	MAR01-05253D	NI	D	6.62	UG/L		119	%D	*	(<5 x MDL)		20
24969	MAR01-05253D	PB	D	77.46	UG/L		163	%D	*	(<5 x MDL)		20
24971	MAR01-05253D	SB	D	.0648	UG/L		146	%D	*	(<5 x MDL)		20
24956	MAR01-05253D	SE	D	0	UG/L		200	%D	*	(<5 x MDL)		20
24951	MAR01-05253D	TL	D	.0024	UG/L		68	%D	*	(<5 x MDL)		20
24971	MAR01-05256M	AS	M	23.3789	UG/L	20	98	%R:		2 %RPD	75	125
24969	MAR01-05256M	BA	M	1365	UG/L	2000	58	%R:	*	1 %RPD	80	120
24971	MAR01-05256M	BE	M	10.8265	UG/L	10	108	%R:		3 %RPD	75	125
24971	MAR01-05256M	CD	M	10.3074	UG/L	10	101	%R:		3 %RPD	75	125
24969	MAR01-05256M	CU	M	618.6	UG/L	1000	62	%R:	*	0 %RPD	80	120
24969	MAR01-05256M	FE	M	1232.69	UG/L	2000	61	%R:	*	1 %RPD	80	120
24969	MAR01-05256M	MN	M	613.63	UG/L	1000	60	%R:	*	0 %RPD	80	120
24969	MAR01-05256M	NI	M	616.91	UG/L	1000	60	%R:	*	2 %RPD	80	120
24969	MAR01-05256M	PB	M	726.61	UG/L	1000	72	%R:	*	2 %RPD	80	120
24971	MAR01-05256M	SB	M	22.5117	UG/L	20	112	%R:		4 %RPD	75	125
24956	MAR01-05256M	SE	M	17.25	UG/L	20	72	%R:	*	0 %RPD	80	120
24951	MAR01-05256M	TL	M	8.9035	UG/L	10	89	%R:		5 %RPD	75	125
24969	MAR01-05256M	ZN	M	626.4	UG/L	1000	63	%R:	*	0 %RPD	80	120
24971	MAR01-05256S	AS	S	23.9678	UG/L	20	101	%R:			75	125
24969	MAR01-05256S	BA	S	1353.14	UG/L	2000	58	%R:	*		80	120
24971	MAR01-05256S	BE	S	10.5117	UG/L	10	105	%R:			75	125
24971	MAR01-05256S	CD	S	9.9911	UG/L	10	98	%R:			75	125
24969	MAR01-05256S	CU	S	618.6	UG/L	1000	62	%R:	*		80	120
24969	MAR01-05256S	FE	S	1222.43	UG/L	2000	61	%R:	*		80	120
24969	MAR01-05256S	MN	S	614.16	UG/L	1000	60	%R:	*		80	120
24969	MAR01-05256S	NI	S	627.1	UG/L	1000	61	%R:	*		80	120
24969	MAR01-05256S	PB	S	710.46	UG/L	1000	70	%R:	*		80	120
24971	MAR01-05256S	SB	S	21.7103	UG/L	20	108	%R:			75	125
24956	MAR01-05256S	SE	S	17.22	UG/L	20	72	%R:	*		80	120
24951	MAR01-05256S	TL	S	8.4748	UG/L	10	85	%R:			75	125

QC Code Legend

B	Blanks	K	Calibration Checks	S	Spikes
C	Control Samples	M	Matrix Spike Duplicates		
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24969	MAR01-05256S	ZN	S	626.06	UG/L	1000	62	%R:	*			80	120
24956	MAR01-05327D	SE	D	0	MG/L		0	%D		(<5 x MDL)			20
24956	MAR01-05327S	SE	S	.92	MG/L	1	92	%R:				50	150
24956	MAR01-05328S	SE	S	1.0115	MG/L	1	101	%R:				50	150
24956	MAR01-05339S	SE	S	1.0505	MG/L	1	105	%R:				50	150
24951	MAR01-05426D	PB	D	.1328	UG/L		185	%D	*	(<5 x MDL)			20
24958	MAR01-05427D	P	D	.2694	MG/L		1	%D					20
24951	MAR01-05427M	PB	M	46.8829	UG/L	50	88	%R:			2 %RPD	75	125
24958	MAR01-05427S	P	S	.902	MG/L	0.5	126	%R:	*			75	125
24951	MAR01-05427S	PB	S	47.9378	UG/L	50	90	%R:				75	125
24980	MAR01-05427S	SN	S	208.15	UG/L	215	84	%R:				75	125
24980	MAR01-05429S	SN	S	248.15	UG/L	215	103	%R:				75	125
24971	MAR01-05433D	AS	D	11.973	UG/L		0	%D		(<5 x MDL)			20
24971	MAR01-05433D	AS	D	9.3983	UG/L		24	%D	*	(<5 x MDL)			20
24971	MAR01-05433D	B	D	9493.2683	UG/L		0	%D					20
24971	MAR01-05433D	B	D	9572.1954	UG/L		1	%D					20
24971	MAR01-05433D	BE	D	0	UG/L		0	%D		(<5 x MDL)			20
24971	MAR01-05433D	BE	D	0	UG/L		24	%D	*	(<5 x MDL)			20
24971	MAR01-05433D	CD	D	0	UG/L		0	%D		(<5 x MDL)			20
24971	MAR01-05433D	CD	D	0	UG/L		1	%D		(<5 x MDL)			20
24971	MAR01-05433D	LI	D	495.2404	UG/L		0	%D		(<5 x MDL)			20
24971	MAR01-05433D	MO	D	255.9985	UG/L		1	%D					20
24971	MAR01-05433D	MO	D	279.2034	UG/L		9	%D					20
24971	MAR01-05433D	SI	D	14.6554	MG/L		1	%D					20
24971	MAR01-05433D	SI	D	14.6727	MG/L		1	%D					20
24971	MAR01-05433D	SR	D	10336.4371	UG/L		1	%D					20
24971	MAR01-05433D	SR	D	10779.5291	UG/L		5	%D					20
24971	MAR01-05434M	AS	M	1019.9077	UG/L	1000	99	%R:			1 %RPD	75	125
24971	MAR01-05434M	AS	M	983.5704	UG/L	1000	95	%R:			3 %RPD	75	125
24971	MAR01-05434M	B	M	9190.1627	UG/L	5000	82	%R:			5 %RPD	75	125
24971	MAR01-05434M	B	M	9560.0532	UG/L	5000	82	%R:			1 %RPD	75	125
24971	MAR01-05434M	BE	M	471.6928	UG/L	500	94	%R:			2 %RPD	75	125
24971	MAR01-05434M	BE	M	472.718	UG/L	500	95	%R:			2 %RPD	75	125
24971	MAR01-05434M	CD	M	410.1739	UG/L	500	82	%R:			3 %RPD	75	125
24971	MAR01-05434M	CD	M	423.6572	UG/L	500	85	%R:			0 %RPD	75	125
24971	MAR01-05434M	LI	M	2365.4321	UG/L	2000	98	%R:			3 %RPD	75	125
24971	MAR01-05434M	MO	M	6300.8724	UG/L	5000	104	%R:			4 %RPD	75	125

QC Code Legend

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24971	MAR01-05434M	MO	M	6560.1446	UG/L	5000	107	%R:		0 %RPD	75	125
24971	MAR01-05434M	SI	M	25.5611	MG/L	5	115	%R:		15 %RPD	75	125
24971	MAR01-05434M	SI	M	29.802	MG/L	10	83	%R:		1 %RPD	75	125
24971	MAR01-05434M	SR	M	14368.7117	UG/L	5000	105	%R:		3 %RPD	75	125
24971	MAR01-05434M	SR	M	14939.1822	UG/L	5000	105	%R:		1 %RPD	75	125
24971	MAR01-05434S	AS	S	1012.0601	UG/L	1000	98	%R:			75	125
24971	MAR01-05434S	AS	S	984.3458	UG/L	1000	95	%R:			75	125
24971	MAR01-05434S	B	S	9426.7684	UG/L	5000	86	%R:			75	125
24971	MAR01-05434S	B	S	9639.4868	UG/L	5000	84	%R:			75	125
24971	MAR01-05434S	BE	S	478.4626	UG/L	500	96	%R:			75	125
24971	MAR01-05434S	BE	S	482.3376	UG/L	500	96	%R:			75	125
24971	MAR01-05434S	CD	S	407.7619	UG/L	500	82	%R:			75	125
24971	MAR01-05434S	CD	S	422.4172	UG/L	500	84	%R:			75	125
24971	MAR01-05434S	LI	S	2447.0639	UG/L	2000	102	%R:			75	125
24971	MAR01-05434S	MO	S	6330.6464	UG/L	5000	104	%R:			75	125
24971	MAR01-05434S	MO	S	6554.0652	UG/L	5000	107	%R:			75	125
24971	MAR01-05434S	SI	S	25.7995	MG/L	5	120	%R:			75	125
24971	MAR01-05434S	SI	S	29.627	MG/L	10	81	%R:			75	125
24971	MAR01-05434S	SR	S	14527.5707	UG/L	5000	108	%R:			75	125
24971	MAR01-05434S	SR	S	14852.414	UG/L	5000	103	%R:			75	125
24969	MAR01-05435D	AG	D	0	UG/L		200	%D	* (<5 x MDL)			20
24969	MAR01-05435D	AG	D	7.4	UG/L		582	%D	* (<5 x MDL)			20
24969	MAR01-05435D	AL	D	11.85	UG/L		185	%D	* (<5 x MDL)			20
24969	MAR01-05435D	AL	D	598.25	UG/L		18	%D	(<5 x MDL)			20
24969	MAR01-05435D	BA	D	20.8	UG/L		53	%D	* (<5 x MDL)			20
24969	MAR01-05435D	BA	D	4.35	UG/L		110	%D	* (<5 x MDL)			20
24969	MAR01-05435D	CA	D	461.64825	MG/L		1	%D				20
24969	MAR01-05435D	CA	D	489.608	MG/L		9	%D				20
24969	MAR01-05435D	CO	D	0	UG/L		0	%D	(<5 x MDL)			20
24969	MAR01-05435D	CO	D	7.1	UG/L		200	%D	* (<5 x MDL)			20
24969	MAR01-05435D	CR	D	15.55	UG/L		121	%D	* (<5 x MDL)			20
24969	MAR01-05435D	CR	D	0	UG/L		200	%D	* (<5 x MDL)			20
24969	MAR01-05435D	CU	D	0	UG/L		0	%D	(<5 x MDL)			20
24969	MAR01-05435D	CU	D	0	UG/L		0	%D	(<5 x MDL)			20
24969	MAR01-05435D	FE	D	20.95	UG/L		68	%D	* (<5 x MDL)			20
24969	MAR01-05435D	FE	D	417.8	UG/L		0	%D	(<5 x MDL)			20
24969	MAR01-05435D	MG	D	1937.9977	UG/L		0	%D				20

QC Code Legend

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24969	MAR01-05435D	MG	D	2021.69735	UG/L		12	%D					20
24969	MAR01-05435D	MN	D	82.6	UG/L		3	%D		(<5 x MDL)			20
24969	MAR01-05435D	MN	D	97.95	UG/L		0	%D		(<5 x MDL)			20
24969	MAR01-05435D	NI	D	0	UG/L		200	%D	*	(<5 x MDL)			20
24969	MAR01-05435D	NI	D	102.25	UG/L		209	%D	*	(<5 x MDL)			20
24969	MAR01-05435D	V	D	.25	UG/L		204	%D	*	(<5 x MDL)			20
24969	MAR01-05435D	V	D	0	UG/L		0	%D		(<5 x MDL)			20
24969	MAR01-05435D	ZN	D	10.2	UG/L		51	%D	*	(<5 x MDL)			20
24969	MAR01-05435D	ZN	D	0	UG/L		200	%D	*	(<5 x MDL)			20
24969	MAR01-05443D	AG	D	0	UG/L		0	%D		(<5 x MDL)			20
24969	MAR01-05443D	AL	D	0	UG/L		200	%D	*	(<5 x MDL)			20
24969	MAR01-05443D	BA	D	43.77	UG/L		1	%D		(<5 x MDL)			20
24969	MAR01-05443D	CA	D	18.67419	MG/L		2	%D					20
24969	MAR01-05443D	CO	D	.89	UG/L		78	%D	*	(<5 x MDL)			20
24969	MAR01-05443D	CR	D	.49	UG/L		141	%D	*	(<5 x MDL)			20
24969	MAR01-05443D	CU	D	0	UG/L		0	%D		(<5 x MDL)			20
24969	MAR01-05443D	FE	D	42.88	UG/L		7	%D		(<5 x MDL)			20
24969	MAR01-05443D	K	D	50.40487	MG/L		2	%D					20
24969	MAR01-05443D	MG	D	2.68746	MG/L		3	%D					20
24969	MAR01-05443D	MN	D	4.06	UG/L		14	%D		(<5 x MDL)			20
24969	MAR01-05443D	NI	D	14.18	UG/L		+03	%D	*	(<5 x MDL)			20
24956	MAR01-05443D	SE	D	0	UG/L		0	%D					20
24969	MAR01-05443D	V	D	25.1	UG/L		29	%D	*	(<5 x MDL)			20
24969	MAR01-05443D	ZN	D	8.94	UG/L		19	%D		(<5 x MDL)			20
24969	MAR01-05446S	AG	S	1032.12	UG/L	1000	103	%R:				75	125
24969	MAR01-05446S	AL	S	9491.27	UG/L	10000	95	%R:				75	125
24969	MAR01-05446S	CO	S	2244.1	UG/L	2500	90	%R:				75	125
24969	MAR01-05446S	CR	S	911.09	UG/L	1000	90	%R:				75	125
24969	MAR01-05446S	CU	S	1135.23	UG/L	1250	91	%R:				75	125
24969	MAR01-05446S	FE	S	4505.89	UG/L	5000	90	%R:				75	125
24969	MAR01-05446S	K	S	35.54278	MG/L	25	98	%R:				75	125
24969	MAR01-05446S	MN	S	2272.4	UG/L	2500	90	%R:				75	125
24969	MAR01-05446S	NI	S	2260.11	UG/L	2500	89	%R:				75	125
24969	MAR01-05446S	V	S	2338.91	UG/L	2500	93	%R:				75	125
24969	MAR01-05446S	ZN	S	2520.9	UG/L	2500	94	%R:				75	125
24969	MAR01-05451D	AG	D	3.7	UG/L		200	%D	*	(<5 x MDL)			20
24969	MAR01-05451D	AL	D	15.78	UG/L		51	%D	*	(<5 x MDL)			20

QC Code Legend

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24969	MAR01-05451D	BA	D	4.6	UG/L		97	%D	*	(<5 x MDL)		20
24969	MAR01-05451D	CA	D	489.32537	MG/L		5	%D				20
24969	MAR01-05451D	CO	D	0	UG/L		0	%D		(<5 x MDL)		20
24969	MAR01-05451D	CR	D	2.85	UG/L		32	%D	*	(<5 x MDL)		20
24969	MAR01-05451D	CU	D	0	UG/L		0	%D		(<5 x MDL)		20
24969	MAR01-05451D	FE	D	4.58	UG/L		64	%D	*	(<5 x MDL)		20
24969	MAR01-05451D	K	D	22.07525	MG/L		20	%D				20
24969	MAR01-05451D	MG	D	275.43902	MG/L		7	%D				20
24969	MAR01-05451D	MN	D	217.81	UG/L		5	%D				20
24969	MAR01-05451D	NA	D	254.14617	MG/L		19	%D				20
24969	MAR01-05451D	NI	D	15.82	UG/L		43	%D	*	(<5 x MDL)		20
24969	MAR01-05451D	V	D	11.82	UG/L		31	%D	*	(<5 x MDL)		20
24969	MAR01-05451D	ZN	D	36.56	UG/L		19	%D		(<5 x MDL)		20
24969	MAR01-05453D	AG	D	0	UG/L		0	%D		(<5 x MDL)		20
24969	MAR01-05453D	AL	D	29.48	UG/L		6	%D		(<5 x MDL)		20
24969	MAR01-05453D	BA	D	4.29	UG/L		38	%D	*	(<5 x MDL)		20
24969	MAR01-05453D	CO	D	0	UG/L		200	%D	*	(<5 x MDL)		20
24969	MAR01-05453D	CR	D	.75	UG/L		122	%D	*	(<5 x MDL)		20
24969	MAR01-05453D	CU	D	0	UG/L		0	%D		(<5 x MDL)		20
24969	MAR01-05453D	FE	D	2.99	UG/L		30	%D	*	(<5 x MDL)		20
24969	MAR01-05453D	K	D	19.68457	MG/L		19	%D				20
24969	MAR01-05453D	MG	D	251.76512	MG/L		15	%D				20
24969	MAR01-05453D	MN	D	202.77	UG/L		11	%D				20
24969	MAR01-05453D	NI	D	20.23	UG/L		19	%D		(<5 x MDL)		20
24969	MAR01-05453D	V	D	31.39	UG/L		7	%D		(<5 x MDL)		20
24969	MAR01-05453D	ZN	D	28.73	UG/L		14	%D		(<5 x MDL)		20
24956	MAR01-05454D	SE	D	0	UG/L		200	%D	*	(<5 x MDL)		20
24969	MAR01-05454S	AG	S	970.22	UG/L	1000	97	%R:			75	125
24969	MAR01-05454S	AL	S	8346.63	UG/L	10000	83	%R:			75	125
24969	MAR01-05454S	CO	S	2026.75	UG/L	2500	81	%R:			75	125
24969	MAR01-05454S	CR	S	815.97	UG/L	1000	81	%R:			75	125
24969	MAR01-05454S	CU	S	1013.97	UG/L	1000	101	%R:			75	125
24969	MAR01-05454S	FE	S	4047.51	UG/L	5000	81	%R:			75	125
24969	MAR01-05454S	K	S	36.73812	MG/L	25	85	%R:			75	125
24969	MAR01-05454S	MN	S	2043.43	UG/L	2500	81	%R:			75	125
24969	MAR01-05454S	NI	S	2064.35	UG/L	2500	82	%R:			75	125
24969	MAR01-05454S	V	S	2069.85	UG/L	2500	82	%R:			75	125

QC Code Legend

B	Blanks	K	Calibration Checks	S	Spikes
C	Control Samples	M	Matrix Spike Duplicates		
D	Duplicates	R	Surrogates		

- QUALITY CONTROL REPORT -

Printed: 3/20/2001

WS#	Lab#	Test ID	QC Code	Result	Units	True Added	-- QC Calculations -- QC1			-- QC Calculations -- QC2	Lower Limit	Upper Limit
24969	MAR01-05454S	ZN	S	2120.58	UG/L	2500	85	%R:			75	125
24958	MAR01-05473D	P	D	.1332	MG/L		56	%D	*			20
24958	MAR01-05473S	P	S	.8112	MG/L	0.5	115	%R:			75	125
24969	MAR01-05482D	AG	D	0	UG/L		200	%D	*	(<5 x MDL)		20
24969	MAR01-05482D	CA	D	28.2	MG/L		0	%D				20
24969	MAR01-05482D	CO	D	0	UG/L		200	%D	*	(<5 x MDL)		20
24969	MAR01-05482D	CR	D	0	UG/L		200	%D	*	(<5 x MDL)		20
24969	MAR01-05482D	MN	D	15.49	UG/L		0	%D		(<5 x MDL)		20
24969	MAR01-05482D	NI	D	1.66	UG/L		125	%D	*	(<5 x MDL)		20
24969	MAR01-05482D	ZN	D	1.82	UG/L		85	%D	*	(<5 x MDL)		20
24958	MAR01-05483D	P	D	.0586	MG/L		12	%D		(<5 x MDL)		20
24969	MAR01-05483S	AG	S	1033.57	UG/L	1000	103	%R:			75	125
24969	MAR01-05483S	CA	S	51.23775	MG/L	25	92	%R:			75	125
24969	MAR01-05483S	CO	S	2420.43	UG/L	2500	97	%R:			75	125
24969	MAR01-05483S	CR	S	944.36	UG/L	1000	94	%R:			75	125
24969	MAR01-05483S	MN	S	2319.82	UG/L	2500	92	%R:			75	125
24969	MAR01-05483S	NI	S	2462.37	UG/L	2500	98	%R:			75	125
24958	MAR01-05483S	P	S	.555	MG/L	0.5	101	%R:			75	125
24969	MAR01-05483S	ZN	S	2594.65	UG/L	2500	104	%R:			75	125
24956	PBL 3.12.2	SE	C	-.00194	MG/L		0					
24956	PBL 3.9.2	SE	C	-.00174	MG/L		0					
24956	PBS 3.9 4B	SE	C	-.88	UG/L		0					
24969	PBS3.9.4A	AG	C	.00223	MG/L		0					
24969	PBS3.9.4A	CD	C	.00086	MG/L							
24969	PBS3.9.4A	CR	C	.00102	MG/L							
24969	PBS3.9.4A	PB	C	0	MG/L		0					
24958	PBW	P	B	-.0015	MG/L							
24951	PBW 3.1.3	BE	C	.0191	UG/L							
24971	PBW 3.12.3	AS	C	.2669	UG/L							
24971	PBW 3.12.3	B	C	0	UG/L							
24971	PBW 3.12.3	BE	C	0	UG/L							
24971	PBW 3.12.3	CD	C	.0034	UG/L							
24971	PBW 3.12.3	LI	C	0	UG/L							
24971	PBW 3.12.3	MO	C	.039	UG/L							
24951	PBW 3.12.3	PB	C	2.2208	UG/L							
24956	PBW 3.12.3	SE	C	-1.39	UG/L		0					
24971	PBW 3.12.3	SI	C	.0551	MG/L							

QC Code Legend

B	Blanks	K	Calibration Checks	S	Spikes
C	Control Samples	M	Matrix Spike Duplicates		
D	Duplicates	R	Surrogates		

- QUALITY CONTROL REPORT -

Printed: 3/20/2001

WS#	Lab#	Test ID	QC Code	Result	Units	True Added	-- QC Calculations -- QC1	-- QC Calculations -- QC2	Lower Limit	Upper Limit
24980	PBW 3.12.3	SN	C	6.44	UG/L					
24971	PBW 3.12.3	SR	C	.38	UG/L					
24951	PBW 3.12.3	TL	C	.0054	UG/L					
24956	PBW 3.13.1	SE	C	-.78	UG/L		0			
24971	PBW 3.5.3	AS	C	0	UG/L					
24971	PBW 3.5.3	BE	C	0	UG/L					
24971	PBW 3.5.3	CD	C	0	UG/L					
24971	PBW 3.5.3	MO	C	1.3003	UG/L					
24971	PBW 3.5.3	SB	C	0	UG/L					
24971	PBW 3.5.3	SI	C	.0331	MG/L					
24971	PBW 3.5.3	SR	C	.1092	UG/L					
24971	PBW 3.5.3	TL	C	0	UG/L					
24971	PBW 3.5.3	U	C	0	UG/L					
24951	PBW 3.8.3	AS	C	-.5879	UG/L					
24951	PBW 3.8.3	BE	C	.0505	UG/L					
24951	PBW 3.8.3	CD	C	-.0969	UG/L					
24951	PBW 3.8.3	CR	C	2.1273	UG/L					
24951	PBW 3.8.3	NI	C	.198	UG/L					
24951	PBW 3.8.3	SB	C	.3557	UG/L					
24950	PBW 3.8.3	SE	C	.08	UG/L		0			
24951	PBW 3.8.3	TL	C	.1826	UG/L					
24969	PBW3.12.2	BA	C	.00226	MG/L					
24969	PBW3.12.2	CR	C	.00024	MG/L					
24969	PBW3.12.2	MN	C	.00147	MG/L		0			
24969	PBW3.12.2	NI	C	0	MG/L		0			
24969	PBW3.12.2	PB	C	.0064	MG/L		0			
24969	PBW3.13.1	AG	C	0	MG/L		0			
24969	PBW3.13.1	AL	C	0	MG/L		0			
24969	PBW3.13.1	BA	C	.00139	MG/L		0			
24969	PBW3.13.1	CA	C	0	MG/L		0			
24969	PBW3.13.1	CO	C	.00243	MG/L		0			
24969	PBW3.13.1	CR	C	0	MG/L		0			
24969	PBW3.13.1	CU	C	0	MG/L		0			
24969	PBW3.13.1	FE	C	.00182	MG/L		0			
24969	PBW3.13.1	K	C	.79815	MG/L		0			
24969	PBW3.13.1	MG	C	.00635	MG/L		0			
24969	PBW3.13.1	MN	C	.00096	MG/L		0			

QC Code Legend

B	Blanks	K	Calibration Checks	S	Spikes
C	Control Samples	M	Matrix Spike Duplicates		
D	Duplicates	R	Surrogates		

163945-46

H01013023

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CHAIN OF CUSTODY RECORD

PROJECT NO.: 700A21

PROJECT NAME: Groundwater Sampling at HELSTF Chrome Site

SAMPLER'S SIGNATURE: George Esqueda

DATE COLLECTED	TIME COLLECTED	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	VOCs	TPH mod DRO/GRO	TOC	SVOCs	Explosives	Herbicides	Pesticides	Wash Quality	Tot. Metals	Hexavalent Perchlorate	REMARKS
1-29-01	1235	0143-HMW13-01 01-QC	water	163945	26	x	x	x	x	x	x	x	x	x	x	
1-29-01	1235	0143-HMW13-01 01-QC-TB	water	163946	2	x										
						HCl	HCl	H2SO4	4°C	4°C	4°C	4°C	4°C	HNO3	4°C	

PROJECT INFORMATION			1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LABORATORY: (SIGNATURE)
PROJECT MANAGER: Karen Costa	SAMPLES RECEIVED		(PRINTED NAME) George Esqueda	(PRINTED NAME) R. Peck	(PRINTED NAME) Vicki Hensley
SHIPPING ID. NO.	TOTAL NO. OF CONTAINERS		RECEIVED BY:	RECEIVED BY:	(COMPANY) Trace Analysis
VIA: Lab Courier	CHAIN OF CUSTODY SEALS		(TIME / DATE) 1/30/01 7:10	(TIME / DATE)	(TIME / DATE) 10:00AM 1-31-01
	GOOD CONDITION/CHILLED		SPECIAL INSTRUCTIONS / COMMENTS: Please see attached Analyte list for Details		Bus 4°
	CONFORMS TO RECORD				

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CHAIN OF CUSTODY RECORD

PROJECT NO.: 200421
PROJECT NAME: Groundwater Sampling at HELSTF Chrome Site
SAMPLER'S SIGNATURE: George Esquela

DATE COLLECTED	TIME COLLECTED	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	Nitrogen (NH_3+NH_4)	Tot. Phosphorus	TKN	Chromium 6+	Diss Ions	Diss Metals	Cyanide				REMARKS
1-29-01	1235	0143-HMW13-0101-QC	water	163945	26	x	x	x	x	x	x	x				
				~~163946~~												
						H_2SO_4	H_2SO_4	H_2SO_4	4°C	4°C	HNO_3	NaOH				

PROJECT INFORMATION		
PROJECT MANAGER: Karen Caster	SAMPLES RECEIVED	
	TOTAL NO. OF CONTAINERS	
SHIPPING ID. NO.	CHAIN OF CUSTODY SEALS	
	GOOD CONDITION/CHILLED	
VIA: Lab Courier	CONFORMS TO RECORD	

1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LABORATORY: (SIGNATURE)
George Esquela	[signature]	Vicki Ongley
(PRINTED NAME) George Esquela	(PRINTED NAME) R. Peale	(PRINTED NAME) Vicki Hensley
RECEIVED BY: [signature]	RECEIVED BY:	(COMPANY) Peace Analysis
(TIME / DATE) 1/30/01 7:10	(TIME / DATE)	(TIME / DATE) 10:00 AM 1-31-01

SPECIAL INSTRUCTIONS / COMMENTS: Please see attached Analyte list for Details

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CHAIN OF CUSTODY RECORD

PROJECT NO.: 700A21

PROJECT NAME: Groundwater Sampling at HELSTF Chrome Site

SAMPLER'S SIGNATURE: [signature]

DATE COLLECTED	TIME COLLECTED	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	VOC's	TPH mod. DRO/GRO	TOC	SVOC's	Explosives	Pesticides	Herbicides	Water Quality	Tot. Metals	Dissolved Metals	REMARKS
1/29/01	1029	0143-HMW11-0101-	water	163947	26	x	x	x	x	x	x	x	x	x	x	
1/29/01	1029	0143-HMW11-0101-TB	water	163948	2	x										
						HCl	HCl	H_2SO_4	4°C	4°C	4°C	4°C	4°C	HNO_3	4°C	

PROJECT INFORMATION		
PROJECT MANAGER: Karen Costa	SAMPLES RECEIVED	
	TOTAL NO. OF CONTAINERS	
SHIPPING ID. NO.	CHAIN OF CUSTODY SEALS	
	GOOD CONDITION/CHILLED	
VIA: Lab Courier	CONFORMS TO RECORD	

1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LABORATORY: (SIGNATURE)
(PRINTED NAME) Alejandro Martinez	(PRINTED NAME) R. Peak	(PRINTED NAME) Vicki Hensley
RECEIVED BY:	RECEIVED BY:	(COMPANY) Peace Analysis
(TIME / DATE) 1/30/01 7:10	(TIME / DATE)	(TIME / DATE) 10:00 AM 1-31-01

SPECIAL INSTRUCTIONS / COMMENTS: Please see attached Analyte Listing Details

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CHAIN OF CUSTODY RECORD

PAGE 2 OF 2

PROJECT NO.: 700 A21
PROJECT NAME: Groundwater Sampling at HELSTF Chrome site
SAMPLER'S SIGNATURE: [signature]

DATE COLLECTED	TIME COLLECTED	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	Nitrogen (NH3 + NO3+)	Tot Phosphorus	TKN	Chromium 6+	Diss Iron	Diss Metals	Cyanide				REMARKS
1/29/01	1027	0143-HMW11-0101	water	163947	26	x	x	x	x	x	x	x				
		0143-														
						H_2SO_4	H_2SO_4	H_2SO_4	4°C	4°C	HNO_3	$NaOH$				

PROJECT INFORMATION		
PROJECT MANAGER: Karen Costa	SAMPLES RECEIVED	
	TOTAL NO. OF CONTAINERS	
SHIPPING ID. NO.	CHAIN OF CUSTODY SEALS	
	GOOD CONDITION/CHILLED	
VIA: Lab Courier	CONFORMS TO RECORD	

1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LABORATORY: (SIGNATURE)
[signature]	[signature]	[signature]
(PRINTED NAME) Alejandro Martinez	(PRINTED NAME) R. Peck	(PRINTED NAME) Vicki Hensley
RECEIVED BY: [signature]	RECEIVED BY:	(COMPANY) Trace Analysis
(TIME / DATE) 1/30/01 7:10	(TIME / DATE)	(TIME / DATE) 10:00 AM 1-31-01

SPECIAL INSTRUCTIONS / COMMENTS:
Please see attached Analyte list for Details

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CHAIN OF CUSTODY RECORD

PROJECT NO.: 700A21
PROJECT NAME: Groundwater Sampling at HELSTF Chrome Site
SAMPLER'S SIGNATURE: [signature]

DATE COLLECTED	TIME COLLECTED	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	VOC's	TPH mod DRO/GRO	TOC	SVOC's	Explosives	Pesticides	Herbicides	Water Quality	Tot. Metals	Ammonia Perchlorate	REMARKS
1/29/01	1029	0143-HMW11-0101-MS/MSD	water	163947	26	x	x	x	x	x	x	x	x	x	x	
1/29/01	1025	0143-HMW11-0101-MS/MSD-TB	water	163948	2	x										
						HCl	HCl	H2SO4	4°C	4°C	4°C	4°C	4°C	HNO3	4°C	

PROJECT INFORMATION			1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LABORATORY: (SIGNATURE)
PROJECT MANAGER: Karen Costa	SAMPLES RECEIVED		(PRINTED NAME): Alejandro Martinez	(PRINTED NAME): R. Tech	(PRINTED NAME)
SHIPPING ID. NO.	TOTAL NO. OF CONTAINERS		RECEIVED BY:	RECEIVED BY:	(COMPANY)
VIA: Lab Courier	CHAIN OF CUSTODY SEALS		(TIME / DATE): 1/30/01 7:10	(TIME / DATE)	(TIME / DATE)
	GOOD CONDITION/CHILLED		SPECIAL INSTRUCTIONS / COMMENTS: Please see attached Analyte list for Details		
	CONFORMS TO RECORD				

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CHAIN OF CUSTODY RECORD

PROJECT NO.: 700A21
PROJECT NAME: Groundwater Sampling at HELSTF Chrome Site
SAMPLER'S SIGNATURE: [signature]

DATE COLLECTED	TIME COLLECTED	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	Nitrogen (NH_3 + NH_4)	Tot. Phosphorus	TKN	Chromium 6+	Diss Ions	Diss Metals	Cyanide				REMARKS
1/29/01	1029	0143-HMW11-0101-MS/MSD	water	163947	26	x	x	x	x	x	x	x				
						H_2SO_4	H_2SO_4	H_2SO_4	4°C	4°C	HNO_3	NaOH				

PROJECT INFORMATION		
PROJECT MANAGER: Karen Costa	SAMPLES RECEIVED	
SHIPPING ID. NO.	TOTAL NO. OF CONTAINERS	
	CHAIN OF CUSTODY SEALS	
VIA: Lab Courier	GOOD CONDITION/CHILLED	
	CONFORMS TO RECORD	

1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LABORATORY: (SIGNATURE)
(PRINTED NAME) Alejandro Martinez	(PRINTED NAME) R. Peck	(PRINTED NAME)
RECEIVED BY:	RECEIVED BY:	(COMPANY)
(TIME / DATE) 1/30/01 7:10	(TIME / DATE)	(TIME / DATE)

SPECIAL INSTRUCTIONS / COMMENTS: Please see attached Analyte List for Details

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CHAIN OF CUSTODY RECORD

PROJECT NO.: 700A21

PROJECT NAME: Groundwater Sampling, HELSTF Chrome Site

SAMPLER'S SIGNATURE: [signature]

DATE COLLECTED	TIME COLLECTED	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	VOC's	TPH mod DRO/GRO	TOC	SVOC's	Explosives	Pesticides	Water Quality	Tot. Metals	Herbicides	Ammonia Perchlorate	REMARKS
1/29/01	1482	0143-HMW43-01 01	water	163949	26	X	X	X	X	X	X	X	X	X	X	
1/29/01	1402	0143-HMW43-01 01-TB	water	163950	2	X										
						HCL	HCL	H2SO4	4°C	4°C	4°C	4°C	4°C	HNO3	4°C	

PROJECT INFORMATION			1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LABORATORY: (SIGNATURE)
PROJECT MANAGER: Karen Coste	SAMPLES RECEIVED		(PRINTED NAME) Alejandro Martinez	(PRINTED NAME) R. Peele	(PRINTED NAME) Vicki Hensley
SHIPPING ID. NO.	TOTAL NO. OF CONTAINERS		RECEIVED BY:	RECEIVED BY:	(COMPANY) Trace Analysis
VIA: Lab Courier	CHAIN OF CUSTODY SEALS		(TIME / DATE) 1/30/01 7:10	(TIME / DATE)	(TIME / DATE) 10:00 1-31-01
	GOOD CONDITION/CHILLED		SPECIAL INSTRUCTIONS / COMMENTS: Please see attached Analyte List for Details		Bys 4°
	CONFORMS TO RECORD				

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CHAIN OF CUSTODY RECORD

PROJECT NO.: 700 A21

PROJECT NAME: Groundwater Sampling at HELSTF Chromesite

SAMPLER'S SIGNATURE: [signature]

DATE COLLECTED	TIME COLLECTED	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	Nitrogen (NH3+NH4)	Tot. Phosphorus	TKN	Chromium 6+	Dis. Ions	Diss. Metals	Cyanide				REMARKS
1/29/01	1402	043-HMW43-01	water	163949	24	x	x	x	x	x	x	x				
						H_2SO_4	H_2SO_4	H_2SO_4	4°C	4°C	HNO_3	NaOH				

PROJECT INFORMATION			1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LABORATORY: (SIGNATURE)
PROJECT MANAGER: Karen Costa	SAMPLES RECEIVED		(PRINTED NAME) Melanie Martinez	(PRINTED NAME) R. Peck	(PRINTED NAME) Vicki Hinsley
SHIPPING ID. NO.	TOTAL NO. OF CONTAINERS		RECEIVED BY:	RECEIVED BY:	(COMPANY) Teace Analysis
VIA: Lab Courier	CHAIN OF CUSTODY SEALS		(TIME / DATE) 1/30/01 7:10	(TIME / DATE)	(TIME / DATE) 10:00 AM 1-31-01
	GOOD CONDITION/CHILLED		SPECIAL INSTRUCTIONS / COMMENTS: Please see attached Analyte list for Details		
	CONFORMS TO RECORD				

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CHAIN OF CUSTODY RECORD

PROJECT NO.: 700A21

PROJECT NAME: Groundwater Sampling at HELSTF Chrome Site

SAMPLER'S SIGNATURE: George Esqueda

DATE COLLECTED	TIME COLLECTED	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	VOC's	TPH mod 8015/8020	TOC	SVOC's	Explosives	Pesticides	Herbicides	Water Quality	Tot. Metals	Inorganic Perchlorate	REMARKS
1-29-01	1235	0143-HMW13-0101	water	163951	26	x	x	x	x	x	x	x	x	x	x	
1-29-01	1235	0143-HMW13-0101-TB		163952	2	x										
						HCl	HCl	H_2SO_4	4°C	4°C	4°C	4°C	4°C	HNO_3	4°C	

PROJECT INFORMATION			1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LABORATORY: (SIGNATURE)
PROJECT MANAGER: Karen Costa	SAMPLES RECEIVED		(PRINTED NAME) George Esqueda	(PRINTED NAME)	(PRINTED NAME) Vicki Hensley
SHIPPING ID. NO.	TOTAL NO. OF CONTAINERS		RECEIVED BY:	RECEIVED BY:	(COMPANY) Peace Analysis
VIA: hand Courier	CHAIN OF CUSTODY SEALS		(TIME / DATE) 1/30/01 7:10	(TIME / DATE)	(TIME / DATE) 10:00 AM 1-31-01
	GOOD CONDITION/CHILLED		SPECIAL INSTRUCTIONS / COMMENTS: Please see attached Analyte list for Details		Pos 4°
	CONFORMS TO RECORD				

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CHAIN OF CUSTODY RECORD

PROJECT NO.: 700421

PROJECT NAME: Ground water Sampling at HELSTF Chrome Site

SAMPLER'S SIGNATURE: George Esqueda

DATE COLLECTED	TIME COLLECTED	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	Nitrogen (Oxs + NH4)	Tot. Phosphorus	TKN	Chromium 6+	Diss Ions	Diss Metals	Cyanide				REMARKS
1-29-01	1235	0143-HMW13-0101	water	163951	26	X	X	X	X	X	X	X				
						H_2SO_4	H_2SO_4	H_2SO_4	4°C	4°C	HNO_3	NaOH				

PROJECT INFORMATION			1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LABORATORY: (SIGNATURE)
PROJECT MANAGER: Karen Costa	SAMPLES RECEIVED		(PRINTED NAME) George Esqueda	(PRINTED NAME) R. Peck	(PRINTED NAME) Vicki Hensley
SHIPPING ID. NO.	TOTAL NO. OF CONTAINERS		RECEIVED BY:	RECEIVED BY:	(COMPANY) Tetra Analysis
	CHAIN OF CUSTODY SEALS		(TIME / DATE) 1/30/01 7:10	(TIME / DATE)	(TIME / DATE) 10:00 Am 1-31-01
VIA: Lab Courier	GOOD CONDITION/CHILLED		SPECIAL INSTRUCTIONS / COMMENTS: Please see Attached Analyte list for Details		Bus 4
	CONFORMS TO RECORD				

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CHAIN OF CUSTODY RECORD

PROJECT NO.: 900A21

PROJECT NAME: Groundwater Sampling, HEGSTF Chrome site

SAMPLER'S SIGNATURE: [signature]

DATE COLLECTED	TIME COLLECTED	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	VOC's	TPH mod. DRO/GRO	TOC	SVOC's	Explosives	Pesticides	Herbicides	Water Quality	Tot. Metals	Ammonia Perchlorate	REMARKS
1/30/01	1128	0143-HMW38-01 01	water	164014	26	X	X	X	X	X	X	X	X	X	X	
1/30/01	1128	0143-HMW38-01 01-TB	water	164015	2	X										
						HCl	HCl	H_2SO_4	4°C	4°C	4°C	4°C	4°C	HNO3	4°C	

PROJECT INFORMATION			1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LABORATORY: (SIGNATURE)
PROJECT MANAGER: Karen Costa	SAMPLES RECEIVED		(PRINTED NAME): Alejandro Martinez	(PRINTED NAME): R. Peck	(PRINTED NAME): Vicki Hansley
SHIPPING ID. NO.	TOTAL NO. OF CONTAINERS		RECEIVED BY:	RECEIVED BY:	(COMPANY): Pace Analysis
VIA: Lab Courier	CHAIN OF CUSTODY SEALS		(TIME / DATE): 1/31/01 8:30	(TIME / DATE):	(TIME / DATE): 10:00 2-1-01
	GOOD CONDITION/CHILLED		SPECIAL INSTRUCTIONS / COMMENTS: Please see attached Analyte List for Details		
	CONFORMS TO RECORD				

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CHAIN OF CUSTODY RECORD

PAGE 2 OF 2

PROJECT NO.: 700 A21

PROJECT NAME: Groundwater Sampling at HEGSTF Chrome Site

SAMPLER'S SIGNATURE: [signature]

DATE COLLECTED	TIME COLLECTED	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	Nitrogen (NH_3+NO_3+NO_2)	Tot. Phosphorus	TKN	Chromium 6+	Diss Ions	Diss Metals	Cyanide				REMARKS
1/30/01	1128	0143-HMW38-0101	water	164014	24	X	X	X	X	X	X	X				
						H_2SO_4	H_2SO_4	H_2SO_4	4°C	4°C	HNO_3	NaOH				

PROJECT INFORMATION			1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LABORATORY: (SIGNATURE)
PROJECT MANAGER: Karen Costa	SAMPLES RECEIVED		(PRINTED NAME) Alejandro Martinez	(PRINTED NAME) R. Peck	(PRINTED NAME) Vicki Hensley
SHIPPING ID. NO.	TOTAL NO. OF CONTAINERS		RECEIVED BY:	RECEIVED BY:	(COMPANY) Pace Analysis
VIA: Mb Courier	CHAIN OF CUSTODY SEALS		(TIME / DATE) 1/31/00 8:30	(TIME / DATE)	(TIME / DATE) 10:00 A 2-1-01
	GOOD CONDITION/CHILLED		SPECIAL INSTRUCTIONS / COMMENTS: Please see attached Analyte list for Details		
	CONFORMS TO RECORD				

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CHAIN OF CUSTODY RECORD

PROJECT NO.: 700A21
PROJECT NAME: Groundwater Sampling, HELSTF Chrome Site
SAMPLER'S SIGNATURE: George Esqueda

DATE COLLECTED	TIME COLLECTED	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	VOC's	TPH mod Degreo	TOC	SVOC's	Explosives	Pesticides	Herbicides	Water Quality	Total Metals	Ammonia Perchlorate	REMARKS
1-30-01	1200	0143-HMW37-0101	water	164016	26	X	X	X	X	X	X	X	X	X	X	
1-30-01	1200	0143-HMW37-0101-TB	water	164017	2	X										
						HCl	HCl	H_2SO_4	4°C	4°C	4°C	4°C	4°C	HNO3	4°C	

PROJECT INFORMATION	SAMPLES RECEIVED	1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LABORATORY: (SIGNATURE)
PROJECT MANAGER: Karen Costa	TOTAL NO. OF CONTAINERS	(PRINTED NAME) George Esqueda	(PRINTED NAME)	(PRINTED NAME) Vicki Hensley
SHIPPING ID. NO.	CHAIN OF CUSTODY SEALS	RECEIVED BY:	RECEIVED BY:	(COMPANY) Pace Analysis
VIA: Lab Courier	GOOD CONDITION/CHILLED	(TIME / DATE) 1/31/01 8:30	(TIME / DATE)	(TIME / DATE) 10:00 2-1-01
	CONFORMS TO RECORD	SPECIAL INSTRUCTIONS / COMMENTS: Please see attached analyte list for Details		

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CHAIN OF CUSTODY RECORD

PROJECT NO.: 700A21

PROJECT NAME: Groundwater Sampling at HEGTF Chrome Site

SAMPLER'S SIGNATURE: George Esqueda

DATE COLLECTED	TIME COLLECTED	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	Nitrogen (NH3+NO3)	Tot. Phosphorus	TKN	Chromium 6+	Diss Ions	Diss Metals	Cyanide				REMARKS
1-30-01	1200	0443-HMW37-01 01	water	164016	26	x	x	x	x	x	x	x				
						H_2SO_4	H_2SO_4	H_2SO_4	4°C	4°C	HNO_3	NaOH				

PROJECT INFORMATION			1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LABORATORY: (SIGNATURE)
PROJECT MANAGER: Karen Costa	SAMPLES RECEIVED		(PRINTED NAME) George Esqueda	(PRINTED NAME) R. Peck	(PRINTED NAME) Vicki Hensley
SHIPPING ID. NO.	TOTAL NO. OF CONTAINERS		RECEIVED BY:	RECEIVED BY:	(COMPANY) Peace Analysis
VIA: Lab Courier	CHAIN OF CUSTODY SEALS		(TIME / DATE) 1/31/01 8:30	(TIME / DATE)	(TIME / DATE) 10:00 AM 2-1-01
	GOOD CONDITION/CHILLED		SPECIAL INSTRUCTIONS / COMMENTS: Please see attached Analyte list for Details		
	CONFORMS TO RECORD				

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4° Bryfoam GLI-162-166-271-3

164115-16

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CHAIN OF CUSTODY RECORD

PAGE 1 OF 2

PROJECT NO.: 700A21
PROJECT NAME: Groundwater Sampling, HELSTF Chrome site
SAMPLER'S SIGNATURE: [signature]

DATE COLLECTED	TIME COLLECTED	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	VOCs	TPH mod 8015	TOC	SVOCs	Explosives	Pesticides	Herbicides	Water Quality	Tot. Metals	Ammonia Perchlorate	REMARKS
1/31/01	1157	0143-HMW239-01/01	water	164115	26	x	x	x	x	x	x	x	x	x	x	
1/31/01	1157	0143-HMW239-01 01-TB	water	164116	1	x										
						HCl	HCl	H_2SO_4	4°C	4°C	4°C	4°C	4°C	HNO_3	4°C	

PROJECT INFORMATION			1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LABORATORY: (SIGNATURE)
PROJECT MANAGER: Karen Costa	SAMPLES RECEIVED		(PRINTED NAME): Alejandro Martinez	(PRINTED NAME): R. Peale	(PRINTED NAME): Vicki Hensley
SHIPPING ID. NO.	TOTAL NO. OF CONTAINERS		RECEIVED BY:	RECEIVED BY:	(COMPANY): PACE Analysis
	CHAIN OF CUSTODY SEALS		(TIME / DATE): 1/31/01 15:50	(TIME / DATE)	(TIME / DATE): 10:00 AM 2-2-01
VIA: Lab Courier	GOOD CONDITION/CHILLED		SPECIAL INSTRUCTIONS / COMMENTS: Please see attached Analysis Cost for Details		
	CONFORMS TO RECORD				

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CHAIN OF CUSTODY RECORD

PROJECT NO.: 700A21

PROJECT NAME: Groundwater Sampling at AEGSTF Chrome Site

SAMPLER'S SIGNATURE: Alejandro Martinez

DATE COLLECTED	TIME COLLECTED	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	Nitrogen (NH3+NH4)	Tot. Phosphorus	TKN	Chromium 6+	Diss Ions	Diss Metals	Cyanide				REMARKS
1/31/01	1157	0143-AMW39-0101	water	164115	26	x	x	x	x	x	x	x				
						H_2SO_4	H_2SO_4	H_2SO_4	4°C	4°C	HNO_3	NaOH				

PROJECT INFORMATION			1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LABORATORY: (SIGNATURE)
PROJECT MANAGER: Karen Caste	SAMPLES RECEIVED		(PRINTED NAME) Alejandro Martinez	(PRINTED NAME) R. Peck	(PRINTED NAME) Vicki Hensley
SHIPPING ID. NO.	TOTAL NO. OF CONTAINERS		RECEIVED BY:	RECEIVED BY:	(COMPANY) Peace Analysis
VIA: Lab Courier	CHAIN OF CUSTODY SEALS		(TIME / DATE) 1/31/01 15:50	(TIME / DATE)	(TIME / DATE) 10:00AM 2-2-01
	GOOD CONDITION/CHILLED		SPECIAL INSTRUCTIONS / COMMENTS: Please see attached Analyte List for Details Bus 4		
	CONFORMS TO RECORD				

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CHAIN OF CUSTODY RECORD

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PROJECT NO.: 700A21
PROJECT NAME: Groundwater Sampling at HELSTF Chrome Site
SAMPLER'S SIGNATURE: [signature]

DATE COLLECTED	TIME COLLECTED	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	VOC's	TPH mod. DRO/GRO	TOC	SVOC's	Explosives	Pesticides	Herbicides	Water Quality	Tot. Metals	Ammonia Perchlorate	REMARKS
1/31/01	1110	0143-HMW36-01 01	water	164117	26	X	X	X	X	X	X	X	X	X	X	
1/31/01	1110	0143-HMW36-01 01-TB	water	164118	2	X										
						HCl	HCl	H_2SO_4	4°C	4°C	4°C	4°C	4°C	HNO3	4°C	

PROJECT INFORMATION			1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LABORATORY: (SIGNATURE)
PROJECT MANAGER: Karen Costa	SAMPLES RECEIVED		(PRINTED NAME) Alejandra Martinez	(PRINTED NAME) [illegible]	(PRINTED NAME) Vicki Hensley
SHIPPING ID. NO.	TOTAL NO. OF CONTAINERS		RECEIVED BY: [signature]	RECEIVED BY:	(COMPANY) Trace Analysis
VIA: Lab Courier	CHAIN OF CUSTODY SEALS		(TIME / DATE) 1/31/01 15:50	(TIME / DATE)	(TIME / DATE) 10:00AM 2-2-01
	GOOD CONDITION/CHILLED		SPECIAL INSTRUCTIONS / COMMENTS: Please see attached Analyte List for Details 4°		
	CONFORMS TO RECORD				

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CHAIN OF CUSTODY RECORD

PROJECT NO.: 700A21

PROJECT NAME: Groundwater Sampling at HELSTF Chrome Site

SAMPLER'S SIGNATURE: [signature]

DATE COLLECTED	TIME COLLECTED	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	Nitrogen (NH_3+NH_4)	Tot. Phosphorus	TKN	Chromium 6+	Diss Ions	Diss Metals	Cyanide				REMARKS
1/31/01	1110	0143-HMW36-01	water	164117	26	X	X	X	X	X	X	X				
						H_2SO_4	H_2SO_4	H_2SO_4	4°C	4°C	4°C HNO_3	NaOH				

PROJECT INFORMATION			1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LABORATORY: (SIGNATURE)
PROJECT MANAGER: Karen Costa	SAMPLES RECEIVED		(PRINTED NAME) Alejandro Martinez	(PRINTED NAME) R. Peck	(PRINTED NAME) Vicki Hensley
SHIPPING ID. NO.	TOTAL NO. OF CONTAINERS		RECEIVED BY:	RECEIVED BY:	(COMPANY) Pace Analysis
VIA: Lab Courier	CHAIN OF CUSTODY SEALS		(TIME / DATE) 1/31/01 15:50	(TIME / DATE)	(TIME / DATE) 10:00am 2-2-01
	GOOD CONDITION/CHILLED		SPECIAL INSTRUCTIONS / COMMENTS: Please See attached Analyte list for Details		Bus 40
	CONFORMS TO RECORD				

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CHAIN OF CUSTODY RECORD

PAGE 1 OF 2

PROJECT NO.: 700A21
PROJECT NAME: Ground water Sampling, HELSTF Chrome Site
SAMPLER'S SIGNATURE: [signature]

DATE COLLECTED	TIME COLLECTED	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	VOC's	TPH mod. DRO/GRO	TOC	SVOC's	Explosives	Pesticides	Herbicides	Water Qual Ag	tot. Metals	Ammonia Perchlorate	REMARKS
1/31/01	1157	0143-HMW39-0101-QC	water	164119	26	x	x	x	x	x	x	x	x	x	x	
1/31/01	1157	0143-HMW39-0101-QC-TB	water	164120	2	x										
						HCl	HCl	H_2SO_4	4°C	4°C	4°C	4°C	4°C	HNO_3	4°C	

PROJECT INFORMATION			1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LABORATORY: (SIGNATURE)
PROJECT MANAGER: Karen Costa	SAMPLES RECEIVED		(PRINTED NAME): Alejandro Martinez	(PRINTED NAME): R. Peck	(PRINTED NAME): Vicki Hensley
SHIPPING ID. NO.	TOTAL NO. OF CONTAINERS		RECEIVED BY:	RECEIVED BY:	(COMPANY): Pace Analysis
VIA: Lab Courier	CHAIN OF CUSTODY SEALS		(TIME / DATE): 1/31/01 15:50	(TIME / DATE):	(TIME / DATE): 10:00 hr 2/2/01
	GOOD CONDITION/CHILLED		SPECIAL INSTRUCTIONS / COMMENTS: Please see attached Analyte List for Details		Pace 162 1662658
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CHAIN OF CUSTODY RECORD

PROJECT NO.: 700A81

PROJECT NAME: Groundwater Sampling at HELSTF Chrome Site

SAMPLER'S SIGNATURE: [signature]

DATE COLLECTED	TIME COLLECTED	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	Nitrogen (NH_3+NH_4)	Tot. Phosphorus	TKN	Chromium 6+	Diss. Iron	Diss. Metals	Cyanide				REMARKS
1/31/01	1157	0143-HMW39-0101-QC	Water	164119	24	X	X	X	X	X	X	X				
						H_2SO_4	H_2SO_4	H_2SO_4	4°C	4°C	HNO_3	NaOH				

PROJECT INFORMATION		
PROJECT MANAGER: Karen Costa	SAMPLES RECEIVED	
	TOTAL NO. OF CONTAINERS	
SHIPPING ID. NO.	CHAIN OF CUSTODY SEALS	
	GOOD CONDITION/CHILLED	
VIA: Lab Courier	CONFORMS TO RECORD	

1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LABORATORY: (SIGNATURE)
(PRINTED NAME) Alejandro Martinez	(PRINTED NAME) R. Peck	(PRINTED NAME) Vicki Hensley
RECEIVED BY:	RECEIVED BY:	(COMPANY) Pace Analysis
(TIME / DATE) 1/31/01 15:50	(TIME / DATE)	(TIME / DATE) 10:00 AM 2-2-01

SPECIAL INSTRUCTIONS / COMMENTS:
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CHAIN OF CUSTODY RECORD

PAGE 1 OF 2

PROJECT NO.: 700A21
PROJECT NAME: Groundwater Sampling . HELSTF Chrome Site
SAMPLER'S SIGNATURE: George Esquela

DATE COLLECTED	TIME COLLECTED	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	VOC's	pH mod. DEQ/GRO	TOC	SVOC's	Explosives	Herbicides	Pesticides	Water Quality	Tot. Metals	Ammonia Perchlorate	REMARKS
1/31/01	1312	0143-HMW40-0101	water	164121		x	x	x	x	x	x	x	x	x	x	
1/31/01	1312	0143-HMW40-0101-TB	water	164122		x										
						HCl	HCl	H_2SO_4	4°C	4°C	4°C	4°C	4°C	HNO_3	4°C	

PROJECT INFORMATION			1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LABORATORY: (SIGNATURE)
PROJECT MANAGER: Karen Costa	SAMPLES RECEIVED		(PRINTED NAME) George Esquela	(PRINTED NAME) R. Peck	(PRINTED NAME) Vicki Hensley
SHIPPING ID. NO.	TOTAL NO. OF CONTAINERS		RECEIVED BY:	RECEIVED BY:	(COMPANY) Pace Analysis
	CHAIN OF CUSTODY SEALS		(TIME / DATE) 1/31/01 15:50	(TIME / DATE)	(TIME / DATE) 10:00 Am 2-2-01
VIA: Lab Courier	GOOD CONDITION/CHILLED		SPECIAL INSTRUCTIONS / COMMENTS: Please see attached Analyte List for Details		BLS 162 166 2658 4°
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CHAIN OF CUSTODY RECORD

PROJECT NO.: 700A21
PROJECT NAME: Groundwater Sampling at HELSTF Chrome Site
SAMPLER'S SIGNATURE: George Esquivel

DATE COLLECTED	TIME COLLECTED	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	Nitrogen (NH3 + NO3)	Tot. Phosphorus	TKN	Chromium 6+	Diss. Tin	Diss. Metals	Cyanide				REMARKS
1/31/01	1012	0143-HMW40-0101	water	164121		x	x	x	x	x	x	x				
						H_2SO_4	H_2SO_4	H_2SO_4	4°C	4°C	HNO_3	NaOH				

PROJECT INFORMATION		
PROJECT MANAGER: Karen Costa	SAMPLES RECEIVED	
	TOTAL NO. OF CONTAINERS	
SHIPPING ID. NO.	CHAIN OF CUSTODY SEALS	
	GOOD CONDITION/CHILLED	
VIA: Cab Courier	CONFORMS TO RECORD	

1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LABORATORY: (SIGNATURE)
George Esquivel	[signature]	Vicki Hensley
(PRINTED NAME) George Esquivel	(PRINTED NAME) R. Peck	(PRINTED NAME) Vicki Hensley
RECEIVED BY: [signature]	RECEIVED BY:	(COMPANY) Race Analysis
(TIME / DATE) 1/31/01 15:50	(TIME / DATE)	(TIME / DATE) 10:00 hr 2-2-01

SPECIAL INSTRUCTIONS / COMMENTS:
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164123-24

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CHAIN OF CUSTODY RECORD

PROJECT NO.: 700A21
PROJECT NAME: Groundwater Sampling, HELSTF Chrome Site
SAMPLER'S SIGNATURE: George Esquedo

DATE COLLECTED	TIME COLLECTED	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	VOC's	TPH mod. DRO/GRO	TOC	SVOC's	Explosives	Pesticides	Herbicides	Water Quality	Tot. Metals	Ammonia Perchlorate	REMARKS
1/31/01	1220	0143-HMW41-0101	water	164123	26	x	x	x	x	x	x	x	x	x	x	
1/31/01	1220	0143-HMW41-0101-TB	water	164124	2	x										

PROJECT INFORMATION			1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LABORATORY: (SIGNATURE)
PROJECT MANAGER: Karen Costa	SAMPLES RECEIVED		(PRINTED NAME) George Esquedo	(PRINTED NAME) R. Peck	(PRINTED NAME) Vicki Hensley
SHIPPING ID. NO.	TOTAL NO. OF CONTAINERS		RECEIVED BY:	RECEIVED BY:	(COMPANY) Trace Analysis
	CHAIN OF CUSTODY SEALS		(TIME / DATE) 1/31/01 15:50	(TIME / DATE)	(TIME / DATE) 10:00 AM 2-2-01
VIA: Lab Courier	GOOD CONDITION/CHILLED		SPECIAL INSTRUCTIONS / COMMENTS: Please see attached Analyte List for Details		BCS 4° 1162116262658
	CONFORMS TO RECORD				

PLEASE USE BALL POINT PEN

DISTRIBUTION: WHITE - PROJECT FILES; YELLOW - LAB; PINK - FIELD COPY

MEVATEC CORPORATION
P.O. Box 399
Bldg. 126
WSMR, NM 88002
(505) 678-0263

CHAIN OF CUSTODY RECORD

PROJECT NO.: 700 A21.

PROJECT NAME: Groundwater Sampling at HELSTF Chrome site

SAMPLER'S SIGNATURE: George Esquivel

DATE COLLECTED	TIME COLLECTED	SAMPLE ID	MATRIX	LAB NO.	NO. OF CONTAINERS	Nitrogen (NH3 + NH4)	Tot. Phosphorus	TKN	Chromium 6+	Diss. Iron	Diss. Metals	Cyanide				REMARKS
1/31/01	1220	OK43-HMW41-0101	water	164123	26	x	x	x	x	x	x	x				
						H_2SO_4	H_2SO_4	H_2SO_4	4°C	4°C	HNO_3	NaOH				

PROJECT INFORMATION			1. RELINQUISHED BY: (SIGNATURE)	2. RELINQUISHED BY: (SIGNATURE)	3. RECEIVED BY LABORATORY: (SIGNATURE)
PROJECT MANAGER: Karen Costa	SAMPLES RECEIVED		(PRINTED NAME) George Esquivel	(PRINTED NAME) R. Peck	(PRINTED NAME) Vicki Hensley
SHIPPING ID. NO.	TOTAL NO. OF CONTAINERS		RECEIVED BY:	RECEIVED BY:	(COMPANY) Trace Analysis
	CHAIN OF CUSTODY SEALS		(TIME / DATE) 1/31/01 15:50	(TIME / DATE)	(TIME / DATE) 10:00AM 2-2-01
VIA: Lab Courier	GOOD CONDITION/CHILLED		SPECIAL INSTRUCTIONS / COMMENTS: Please see attached Analyte list for Details		BUS 4°
	CONFORMS TO RECORD				

PLEASE USE BALL POINT PEN

DISTRIBUTION: WHITE - PROJECT FILES; YELLOW - LAB; PINK - FIELD COPY

Analytes: HELSTF Chrome WAO 400 A5/700A21/800GG 01/01

Parameter	Reference Method	Method Type	Laboratory Detection Limits	Hold Time* * before/after extract	Container/ Preservative
Water Quality					
CO_3^{-2} & HCO_3^- Alkalinity pH Conductance, TDS	EPA 310.1 EPA 150.1 EPA 120.1 EPA 160.1	Titrimetric Electrometric Conductivity Meter Gravimetric	1.2 mg/L N/A N/A 50.0 mg/L	14 days 48 hours 28 days 7 days	1-L plastic, 4°C plastic, no preservative
Total Cyanide(**January sampling event only)**	SW846 – 9010B	Distillation	0.01 mg/L	14 days	1-L plastic, NaOH,pH>12
Dissolved Ions					
Chloride Fluoride Bromide Sulfate Nitrate/Nitrite	EPA 300.0	Ion Chromotography	1.0 mg/L 0.20 mg/L 2.0 mg/L 2.0 mg/L 0.10 mg/L	28 days 28 days 28 days 28 days 48 hours	1-L plastic, Field Filter cool to 4°C
Ammonium Perchlorate	EPA 314.0	Ion Chromatography	5 ug/L	28 days	500mL plastic, nonpreserved
Nutrients					
Nitrogen NH_3 & NH_4 Total Phosphorus TKN	EPA 350.1 EPA 365.1 EPA 351.2	Segmented Flow Analyzer Segmented Flow Analyzer Colorimetric	0.05 mg/L 0.01 mg/L 0.1 mg/L	28 days 28 days 28 days	1-L plastic, H_2SO_4
Total Metals					
Aluminum, Manganese Arsenic****, Molybdenum Barium, Nickel Beryllium, Selenium*** Boron, Silicon Cadmium, Silver Calcium, Strontium Chromium, Tin Cobalt, Vanadium Copper, Zinc Iron Lead ** Magnesium	SW846 7060A**** SW846 7740*** SW846 7421**	ICP/AES unless noted AA-GF**** AA-GF**	Aluminum 5.0 mg/L, Manganese 0.2 mg/L Arsenic**** 0.1 mg/L, Molybdenm 1.0 mg/L Barium 0.1 mg/L, Nickel 0.2 mg/L Beryllium 0.001 mg/L, Selenium*** 0.05 mg/L Boron 0.75 mg/L, Silicon 5 mg/L Cadmium 0.01 mg/L, Silver 0.05 mg/L Calcium 1.0 mg/L, Strontium 1.0 mg/L Chromium 0.05 mg/L, Tin 1.0 mg/L Cobalt 0.05 mg/L, Vanadium 0.01 mg/L Copper 1.0 mg/L, Zinc 10.0 mg/L Iron 1.0 mg/L Lead** 0.05 mg/L Magnesium 1.0 mg/L	180 days	500mL plastic, HNO_3 , pH <2
Mercury	SW846-7470	Cold Vapor-AA	0.002 mg/L	28 days	
Chromium $^{6+}$*	SW846 7196A*	Spectrophotometer*	2 µg/L*	24 hours*	500 ml, 4°C*
Dissolved Metals					
Aluminum, Manganese Arsenic****, Molybdenum Barium, Nickel Beryllium, Selenium Boron, Silicon Cadmium, Silver Calcium, Strontium Chromium, Tin Cobalt, Vanadium Copper, Zinc Iron Lead ** Lithium Magnesium	SW846 7060A**** SW846 7740*** SW846 7421**	ICP/AES unless noted AA-GF****	Aluminum 5.0 mg/L, Manganese 0.2 mg/L Arsenic**** 0.1 mg/L, Molybdenm 1.0 mg/L Barium 0.1 mg/L, Nickel 0.2 mg/L Beryllium 0.001 mg/L, Selenium 0.05 mg/L Boron 0.75 mg/L, Silicon 5 mg/L Cadmium 0.01 mg/L, Silver 0.05 mg/L Calcium 1.0 mg/L, Strontium 1.0 mg/L Chromium 0.05 mg/L, Tin 1.0 mg/L Cobalt 0.05 mg/L, Vanadium 0.01 mg/L Copper 1.0 mg/L, Zinc 10.0 mg/L Iron 1.0 mg/L Lead** 0.05 mg/L Lithium 0.50 mg/L Magnesium 1.0 mg/L	180 days	500 ml plastic, Field Filltered Then preserved With HNO_3 to pH <2

Organics					
Volatile Compounds	SW846 8260	GC/MS	Methylene Chloride 2.0 µg/L other 8260 compounds 1.0 µg/L	14 days	3-40 ml, HCl
Petroleum Hydrocarbons	SW846 8015(Mod) DRO & GRO	GC	0.1 mg/L	14 days	3-40 ml each HCl pH≤2 (6 Total)
Semi-Volatiles (SVOCs)	SW846 8270C	GC-MS	Benzo(a)anthracene 1.5 µg/L Benzo(b)&(k) flouranthene 1.5 µg/L Buytlbenzylphthalate 1.5 µg/L Bis(2-chloroethyl)ether 1.5 µg/L 4-Chloro-3-methylphenol 1.5 µg/L Chrysene 1.5 µg/L Hexachloroethane 1.5 µg/L Benzo(a)pyrene 2.0 µg/L 2-Chlorophenol 2.0 µg/L Bis(2-ethylhexyl)phthalate 2.0 µg/L 2-Chlorophenol 2.0 µg/L 2,4-Dichlorophenol 2.0 µg/L 2,4-Dimethylphenol 2.0 µg/L Dimethylphthalate 2.0 µg/L 2,4-Dinitrotoluene 2.0 µg/L 2,6-Dinitrotoluene 2.0 µg/L Hexachlorobenzene 2.0 µg/L Hexachlorobutediene 2.0 µg/L 2-methylphenol 2.0 µg/L 4-methylphenol 2.0 µg/L 2-nitrophenol 2.0 µg/L Phenol 2.0 µg/L Benzyl alcohol 2.0 µg/L Di-n-octylphthalate 2.4 µg/L Benzo(g,h,i)perylene 2.5 µg/L Dibenzo(a,h)anthracene 2.5 µg/L Ideno(1,2,3-cd)pyrene 2.5 µg/L 4-Chloroanaline 4.0 µg/L 2,4,5-trichlorophenol 4.0 µg/L 2,4,6- trichlorophenol 4.5 µg/L 3,3'-Dichlorobenzidine 5.0 µg/L 2-Nitroanaline 5.0 µg/L 3-Nitroanaline 5.0 µg/L 2-Nitroanaline 5.0 µg/L Hexachlorocyclopentadiene 10.0 µg/L 4-Nitrophenol 10.0 µg/L Pentachlorophenol 10.0 µg/L 2-methyl-4,6-dinitrophenol 20.0 µg/L Benzidine 20.0 µg/L 2,4-dinitrophenol 30.0 µg/L Benzoic acid 30.0 µg/L Other 8270 compounds 1.0 µg/L	7 days/40 days	1-1ltr amber glass, no preservative
Explosives	SW846-8330	HPLC	0.001-0.005 mg/L	7 days/40 days	2-1L amber glass no preservative

Pesticides	SW846 8081	Gas Chromatography	Aldrin Alpha-BHC Beta-BHC Delta-BHC Gamma-BHC(Lindane) Chlordane(Total) 4,4'-DDD 4,4'-DDE 4,4'-DDT Dieldrin Endosulfan I Endosulfan II Endosulfan Sulfate Endrin Endrin Aldehyde Endrin Ketone Heptachlor Heptachlor Epoxide Methoxychlor Toxaphene	0.02 ug/L 0.02 ug/L 0.02 ug/L 0.02 ug/L 0.02 ug/L 0.10 ug/L 0.02 ug/L 0.03 ug/L 0.03 ug/L 0.02 ug/L 0.03 ug/L 0.03 ug/L 0.03 ug/l 0.05 ug/L 0.05 ug/L 0.04 ug/L 0.03 ug/L 0.03 ug/L 0.03 ug/L 0.10 ug/L	7 days/40 days	2-1L amber glass no preservative
Herbicides	SW846 8151	Gas Chromatography	Dalapon 2,4-DB Dicamba 2,4-D Dichoroprop Dinoseb MCPA MCPP Silvex 2,4,5-T	1.0 ug/l 0.2 ug/L 0.2 ug/L 0.2 ug/L 0.2 ug/L 0.2 ug/L 10 ug/L 10 ug/L 0.2 ug/L 0.2 ug/L	7 days/ 40 days	2-1L amber glass No preservative
TOC	SW846-9060	TOC analyzer	1.0 mg/L		28 days	2-40 ml, H_2SO_4, pH<2 (QA lab gets 1-250mL amber)